

MANAGEMENT'S DISCUSSION & ANALYSIS – Q2 2022 (June 30, 2022)

This Management's Discussion and Analysis ("MD&A") of Resverlogix Corp.'s operations and financial position should be read in conjunction with the unaudited condensed interim consolidated financial statements and the notes thereto for the three and six months ended June 30, 2022 and 2021, and the audited consolidated financial statements and the notes thereto and the Management's Discussion and Analysis for the year ended December 31, 2021, the eight months ended December 31, 2020 and the year ended April 30, 2020. This MD&A is dated August 11, 2022. Our financial statements have been prepared by management in accordance with International Financial Reporting Standards ("IFRS") and comprise Resverlogix Corp. (the "Company") and its wholly-owned subsidiary Resverlogix Inc. (together referred to as the "Group"). All amounts in the following MD&A are stated in US dollars unless otherwise stated. References to "we", "us" or "our" mean Resverlogix Corp. and its subsidiary unless the context otherwise requires.

## **Cautionary Statement Regarding Forward-Looking Information**

This MD&A contains forward-looking information within the meaning of applicable Canadian securities legislation. Forward-looking information is often, but not always, identified by the use of words such as "believes", "anticipates", "plans", "intends", "will", "should", "expects", "continue", "estimate", "forecasts" and other similar expressions. In particular, this MD&A includes forward-looking information related to:

- aim to commercialize or license to a pharmaceutical partner our products for the treatment of unmet medical needs related to
  prevention of: major adverse cardiovascular events in patients with diabetes mellitus and chronic kidney disease; COVID-19 and
  additional indications;
- aim to carry out trials on our products for the treatment of unmet medical needs related to major adverse cardiovascular events in patients with higher risk such as acute coronary syndrome, diabetes mellitus and chronic kidney disease, COVID-19 and additional indications, and the timing of such trials;
- plans related to our COVID-19, cardiovascular disease and other programs and the planning and design of clinical trials as part
  of each of these programs;
- expectations relating to the timing of significant clinical trial milestones;
- the function and effectiveness of apabetalone, also referred to as RVX-208;
- the development of new compounds and the potential impact of these compounds on multiple diseases;
- aim to obtain regulatory approval for our products;
- expectations with respect to the cost of clinical trials and commercialization of our products;
- projected competitive conditions with respect to our products;
- anticipated sources of revenue and the estimated market for our products;
- expectations regarding the protection of our intellectual property;
- business strategy;
- intentions with respect to dividends; and
- potential milestone payments and royalties pursuant to the license agreements with Shenzhen Hepalink Pharmaceutical Co., Ltd. ("Hepalink") and Medison Pharma Ltd.

Readers are cautioned that our expectations, beliefs, projections and assumptions used in preparation of such information, although considered reasonable at the time of preparation, may prove to be wrong, and as such, undue reliance should not be placed on forward-looking statements. With respect to forward-looking statements contained in this MD&A, we have made key assumptions including:

- general business and economic conditions;
- interest rates;



- the timing of the receipt of regulatory and governmental approvals for research and development projects;
- the availability of financing for research and development projects, or the availability of financing on reasonable terms;
- the ability to refinance existing indebtedness on reasonable terms upon maturity;
- the impact of changes in Canadian dollar-US dollar and other foreign exchange rates on our costs and results;
- market competition;
- our ability to attract and retain skilled staff; and
- ongoing relations with employees and with business partners.

Our actual results, events or developments could be materially different from those expressed or implied by these forward-looking statements. We can give no assurance that any of the events or expectations will occur or be realized. By their nature, forward-looking statements are subject to numerous known and unknown risks and uncertainties including but not limited to:

- risks related to the early stage of our products;
- uncertainties related to clinical trials and product development;
- uncertainties related to current economic conditions;
- risks related to rapid technological change;
- uncertainties related to forecasts and timing of clinical trials and regulatory approval;
- competition in the market for therapeutic products to treat cardiovascular disease, neurodegenerative diseases, diabetes mellitus and other high risk vascular diseases;
- risks related to potential product liability claims;
- availability of additional financing and access to capital for research and development, clinical trials and regulatory approval;
- market acceptance and commercialization of our products;
- the availability and supply of raw materials, including supplies of sufficient active pharmaceutical ingredients for large clinical trials and future commercial production;
- risks related to the effective management of our growth;
- potential reliance on partnering agreements to provide support for discovery and development efforts, and on corporate sponsors, pharmaceutical companies, and others to successfully develop and commercialize our technology;
- the willingness of health care insurers and other organizations to pay for our products;
- risks related to our reliance on key personnel;
- risks related to the regulatory approval process for the manufacture and sale of non-therapeutic and human therapeutic products; and
- our ability to secure and protect our intellectual property, and to operate without infringing on the proprietary rights of others or having third parties circumvent the rights owned or licensed by us.

You should also carefully consider the matters discussed under "Risk Factors" in our Annual Information Form and other documents we file from time to time with securities authorities, which are available through SEDAR at www.sedar.com. Additionally, risks and uncertainties are discussed on page 26 of this MD&A.

The forward-looking statements contained in this MD&A are expressly qualified by this cautionary statement. We disclaim any intention and have no obligation or responsibility, except as required by law, to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

## **Going Concern**

Our success is dependent on the continuation of our research and development activities, progressing the core technologies through clinical trials to commercialization or a strategic partnership, and our ability to obtain additional financing. It is not possible to predict the outcome of future research and development programs, our ability to fund these programs in the future, or to secure a strategic partnership, or the commercialization of products. To date, we have not generated any product revenue. We have incurred significant losses to date, and with no assumption of revenues, we are dependent on our ability to raise additional financial capital by continuing to demonstrate the successful progression of our research and development activities if we are to remain as a going concern.

As at June 30, 2022, we had \$42 thousand of cash. We need to raise additional capital to fund research, development and corporate activities over the next year or we may be forced to cease operations. As at June 30, 2022, we were committed to pay \$13.5 million of current trade and other payables, \$1.4 million for research and development over the next twelve months, and \$0.5 million of lease liabilities over the next twelve months. Furthermore, our \$6.0 million secured convertible debenture with Hepalink is due on May 13, 2023. As at June 30, 2022, the Group is also party to a commercialization partnership where corresponding estimated (discretionary) pre-commercialization activities over the next twelve months total approximately \$10 million.

Subsequent to June 30, 2022, we raised \$2.0 million. Our cash as at June 30, 2022, in combination with the \$2.0 million raised subsequent to June 30, 2022, is not sufficient to fund our contractual commitments or our planned business operations over the next year. Therefore, we will have to raise additional capital to fund our contractual commitments and our planned business operations. We continue to pursue and/or examine several sources of additional capital including co-development, licensing, rights or other partnering arrangements, procurement arrangements, private placements and/or public offerings (equity and/or debt). However, there is no assurance that any of these measures will be successfully completed.

The Company will also require additional capital to fund research, development and corporate activities beyond the next year. The Company will continue to explore alternatives to generate additional cash including raising additional equity and/or debt and/or partnering; however, there is no assurance that these initiatives will be successful.

These conditions result in a material uncertainty which may cast significant doubt on our ability to continue as a going concern. If we are not able to raise capital, we may be forced to cease operations.

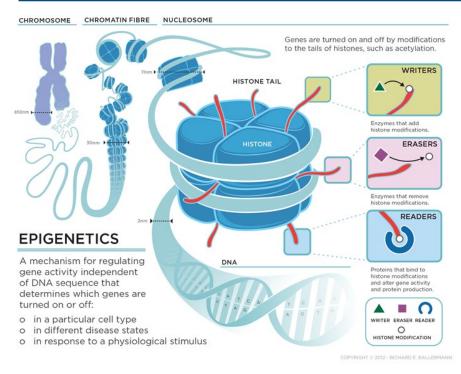
## **Overview**

## What is Epigenetics?

The human body is made up of nearly two hundred different cell types that have cell-specific functions resulting from the selective production of the proteins encoded by human DNA and, more specifically, human genes. Aberrant levels of proteins can contribute to disease progression and disease states. Epigenetics describes the mechanisms by which gene activity is regulated, thereby affecting levels of transcription into messenger RNA ("mRNA") which is then translated into protein. Epigenetics is the study of modifications to chromatin (DNA associated with proteins) that, without affecting the DNA sequence, result in regulation of gene transcription, the first step in producing the proteins that each gene encodes. Such modifications determine whether a gene is "on" or "off" or whether its activity is high or low in a particular cell type, in different disease states or in response to a physiological stimulus. Chromatin modifications are added by enzymes called "writers" and removed by enzymes called "erasers". Other proteins, called "readers", recognize a specific pattern of modifications. In contrast to "writers" and "erasers" that add or remove post translational modifications, "readers" detect the presence or absence of these modifications and serve as a scaffold for the transcriptional machinery directly responsible for gene expression.

Our compounds target one group of "reader" proteins called the Bromodomain and Extra Terminal ("BET") proteins. BET inhibition represents an important new area of drug development, since epigenetic modification is a known hallmark of several complex pathologies, including cardiovascular disease ("CVD"), metabolic disorders, and neurological diseases. Substantial evidence has shown that alterations in the pattern of chromatin modifications underlie these multiple disease states. Epigenetic regulators are promising targets for therapeutic intervention, and hold significant potential for treatment advances in important diseases of high unmet medical need.





#### **Epigenetic Mechanism of Action**

## Resverlogix Corp.

Since our inception, we have focused on developing therapeutics for disease states with high unmet medical need.

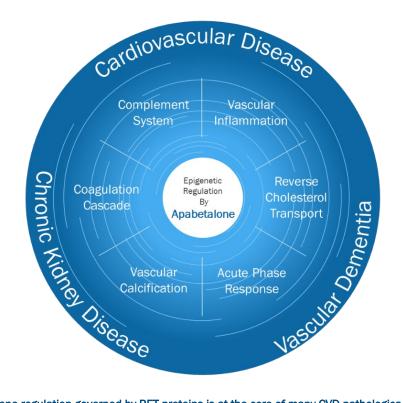


Our Phase 3 clinical trial "BETonMACE" studied apabetalone ("RVX-208") in high-risk CVD patients with type 2 diabetes mellitus ("DM") and low levels of high-density lipoprotein ("HDL"). The primary endpoint was the time to first

occurrence of major adverse cardiac events ("MACE") defined as cardiovascular death, non-fatal myocardial infarction and stroke. On September 30, 2019, we announced the topline results of the BETonMACE study. A total of 2,425 patients were enrolled in the study and followed for a median study duration of 26.5 months and a total of 274 primary endpoints occurred. While the primary endpoint did not reach statistical significance, key secondary and exploratory endpoints illustrating CVD efficacy were met with an excellent safety profile, providing rationale for the continuation of the development of apabetalone in high-risk CVD. Based on the results of the BETonMACE study, the U.S. Food and Drug Administration ("FDA") granted Breakthrough Therapy Designation ("BTD") for apabetalone in combination with top standard of care, including high-intensity statins, for the secondary prevention of MACE in patients with type 2 DM and recent acute coronary syndrome ("ACS"). The achievement of BTD has the potential to expedite apabetalone's clinical development program through more intensive FDA guidance.

### Apabetalone (RVX-208)

Apabetalone is the first BET inhibitor in clinical trials for high risk cardiovascular disease. A hallmark of many diseases such as cancer, inflammation and more recently cardiovascular disease, is aberrant gene transcription. Bromodomains ("BRDs") are a family of evolutionary conserved protein-interaction modules that play key functions in chromatin organisation and regulation of gene transcription. One recognised family of bromodomain containing proteins is the BET family. Apabetalone is the first oral agent in the BET inhibitor class that preferentially targets bromodomain 2 ("BD2") of BET proteins. In binding to this bromodomain, apabetalone affects the expression of multiple genes with roles in a variety of cellular processes. Our lead drug, apabetalone ("RVX-208"), targets BET proteins to impact several important biological processes that are contributors to the pathophysiology of chronic vascular diseases such as CVD, diabetes mellitus ("DM"), and chronic kidney disease ("CKD"), namely: (i) vascular inflammation, (ii) vascular calcification, (iii) acute phase response, (iv) complement and coagulation, and (v) reverse cholesterol transport ("RCT"). Apabetalone is a first-inclass small molecule in development for the secondary prevention of a MACE in high risk CVD patients with a DM co-morbidity. Based on the above-mentioned effects of apabetalone, we are currently exploring the potential for apabetalone to modulate disease-related pathology in other indications including COVID-19, CKD, neurodegenerative disease (such as vascular cognitive dementia) and orphan diseases such as Pulmonary Arterial Hypertension ("PAH").



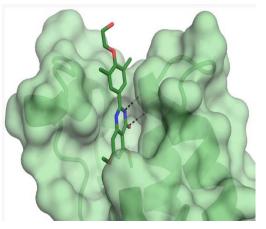
Epigenetic gene regulation governed by BET proteins is at the core of many CVD pathological processes – dysregulation of multiple pathways contributes to increased risk and worse cardiovascular outcomes

## Epigenetic Mechanism of Action: Single Therapeutic Target with Multiple Biological Effects

BET inhibition results in the simultaneous modulation of multiple biological pathways via a single molecular target. Studies highlighting the molecular and mechanistic functions of BET inhibitor molecules and the ongoing development of new BET inhibitors as potential therapeutics in multiple indications are initiating a shift from the current drug development paradigm. From a single molecular target for a single downstream effect, to a multimodal approach whereby multiple biological processes contributing to a disease state are concurrently modulated via a single molecular target, epigenetic modulation is a novel approach to targeting disease pathology.

We believe that this approach is therapeutically and commercially attractive for the following reasons:

- BET proteins all contain highly-conserved bromodomains that play a key role in epigenetic control of gene expression (in many cell types);
- Apabetalone functions via inhibition of BET bromodomain binding to chromatin thereby modulating transcription of particular targets;
- Apabetalone preferentially binds to the second bromodomain of BET family members (BRD2, BRD3 and BRD4), with a 20-fold or higher selectivity for the second bromodomain versus the first bromodomain;
- Apabetalone is highly differentiated from other therapies that focus only on single biological targets such as increasing HDL or decreasing low-density lipoprotein ("LDL") in plasma, and has effects on multiple pathways and biomarkers that function in concert to reduce CVD events; and
- Apabetalone is the only selective BET inhibitor in the field of CVD with no known competitor, providing Resverlogix with an estimated lead of at least 7-8 years over competitors and significant scarcity value.



Apabetalone (RVX-208) Bound in the BET Binding Pocket

Apabetalone has illustrated the potential to become an important and differentiated therapeutic for high-risk patients with CVD, DM, CKD, neurodegenerative disease and orphan diseases.

## **Highlights**

## **Clinical Trial Developments**

## Cardiovascular Disease

Based on our completed clinical trials, a broader and more integrated view of the effects of treatment with apabetalone has been developed across the CVD spectrum with safety and efficacy results for up to 3.5 years of treatment. Analysis of the Company's CVD program data continues to not only strengthen the Company's understanding but also provides a more targeted pathway for future clinical trials with apabetalone. We have completed one Phase 3 study and three Phase 2 studies in patients with varying degrees of CVD severity. In these four foundational CVD trials - ASSERT, SUSTAIN, ASSURE and BETonMACE - a total of 1,771 patients have been dosed with apabetalone and 1,452 with placebo.

The following key findings contributed to determining a therapeutic window and targeted patient group for apabetalone.

- 1) The Phase 2 ASSERT study enrolled 299 patients (225 treated with apabetalone and 74 with placebo). Findings demonstrated by ASSERT included:
  - 200 mg/day of apabetalone was the optimal dose, based on safety and efficacy;
  - Patients with a low level of HDL-C at baseline had a better response for HDL-C and ApoA-I increases when treated with apabetalone; and
  - Best responses were observed in those patients given apabetalone in combination with second generation statins such as Rosuvastatin (Crestor®) or Atorvastatin (Lipitor®).
- 2) The Phase 2b SUSTAIN study enrolled 176 patients (88 treated with apabetalone and 88 with placebo). Findings demonstrated by SUSTAIN included:
  - Low baseline HDL and low baseline ApoA-I were the best responders; and
  - There was one MACE event in subjects treated with apabetalone compared to six in subjects treated with placebo.
- 3) The Phase 2b ASSURE study enrolled 323 patients (243 with apabetalone and 80 with placebo). Findings demonstrated by ASSURE included:
  - Low baseline HDL were the best responders;
  - Elevated baseline hsCRP were strong responders;
  - A decrease in percent atheroma volume (-0.4 in apabetalone treatment group) from baseline to 26 weeks (p=0.08);
  - Significant reductions in atherosclerotic plaque ("AP") length and AP index compared to baseline (pre-treatment) measures and favourable modulation of ultrasonic measures of plaque vulnerability (Shishikura et al. 2018); and
  - There were fewer MACE events in subjects treated with apabetalone (7.4%) vs. subjects treated with placebo (13.8%).
- 4) The combined data from ASSERT, SUSTAIN and ASSURE represented 798 patients (556 treated with apabetalone and 242 with placebo). This data was published in the American Journal of Cardiovascular Drugs by Nicholls et al. 2017. Findings demonstrated by this analysis included:
  - Treatment with apabetalone led to a significant reduction in MACE. Patients treated with apabetalone had a lower cumulative MACE rate of 5.9% vs. 10.4% in the placebo treated group (p=0.02);
  - In exploratory subgroups, the benefit of apabetalone treatment appeared more striking with MACE occurring less frequently in association with apabetalone than with placebo among patients with DM (5.4% vs. 12.7%; p=0.02); and
  - Similarly, MACE occurred less frequently in association with apabetalone than with placebo in patients with baseline HDL-C < 39 mg/dL (5.5 vs. 12.8%; p=0.01) or with baseline hsCRP levels > 2 mg/L (5.4 vs. 14.2%; p = 0.02).

Based on these findings, our intention with the BETonMACE trial was to reconfirm in a larger prospective setting, in patients with modifiable vascular disease (i.e. low HDL and DM), the reduction of MACE coupled with favourable effects on markers of CVD risk.

## BETonMACE

The BETonMACE study, "Effect of RVX-208 on Time to Major Adverse Cardiovascular Events in High-Risk Type 2 Diabetes Mellitus Subjects with Coronary Artery Disease", was a large international multi-center, double-blind, randomized, parallel group, placebocontrolled clinical trial to determine whether treatment with apabetalone in combination with rosuvastatin or atorvastatin increased the time to MACE compared to treatment with rosuvastatin or atorvastatin alone. The study was conducted at 195 sites in 13 countries



worldwide. The primary endpoint of the BETonMACE trial was designed to show a reduction of MACE, narrowly defined as a single composite endpoint of cardiovascular ("CV") death, non-fatal myocardial infarction ("MI") and stroke. Secondary endpoints included: time to first occurrence of the composite broad MACE which includes the addition of hospitalization for CVD events (unstable angina and revascularization procedures), changes in lipoprotein concentrations (HDL and apolipoprotein A-I ("ApoA-I")), changes in diabetes mellitus variables (glucose and glycated hemoglobin), change in alkaline phosphatase ("ALP"), changes in kidney function as well as additional safety and tolerability of apabetalone (RVX-208). In order to be eligible to participate in the study, patients had documented history of type 2 Diabetes Mellitus, experienced a recent (defined as 7-90 days prior to randomization) Coronary Artery Disease ("CAD") event including unstable angina, revascularization procedure or MI and low levels of HDL (<40 mg/dL for males and <45 mg/dL for females). Standard of care high potency statin therapy was maintained throughout the study, consisting of daily dose of either atorvastatin 40-80 mg or rosuvastatin 20-40 mg. After an initial screening period of 1 to 2 weeks during which subjects were treated with standard of care statin therapy, subjects were then randomized to either apabetalone (RVX-208) 100 mg b.i.d. (twice daily) or matching placebo with continued statin treatment. This combination treatment period continued for the duration of the study. A full detailed protocol for the BETonMACE study can be viewed on www.clinicaltrials.gov with the following NTC ID, NCT02586155.

The dosing of the first patient occured on November 11, 2015, the topline results were announed on September 30, 2019 and presented November 16, 2019 at a Late Breaking Science Session during the American Heart Association's ("AHA") annual conference. BETonMACE's primary endpoint did not reach statistical significance.

In BETonMACE, a total of 274 primary endpoints occurred, 125 (10.9%) in the apabetalone group and 149 (12.4%) in the placebo group. The reduction in the primary endpoint of CV death or non-fatal MI or stroke by apabetalone did not reach statistical significance (hazard ratio 0.82, 95% confidence interval ("CI") 0.65-1.04, p=0.11). The prespecified sensitivity analysis excluding the 21 deaths adjudicated as undetermined narrowly missed statistical significance with 113 primary endpoints in the apabetalone group (9.3%) and 140 in the placebo group (11.6%) (hazard ratio 0.79, 95% CI 0.62-1.01, p=0.06). These types of sensitivity analyses are included for regulatory agencies because the cause of death cannot always be conclusively adjudicated for reasons including unavailable documentation and the patient's family consent. Apabetalone was well tolerated with similar rates of adverse events and serious adverse events compared to placebo. Full results of the BETonMACE study have been published in the Journal of the American Medical Association<sup>1</sup>.

Consistent trending MACE improvements were observed for all the secondary endpoints including in CV death, non-fatal MI, and hospitalization for congestive heart failure ("CHF") except for stroke which demonstrated neutral efficacy. These trends are clinically relevant for these MACE endpoint components with a hazard ratio range of 0.79-0.81 for CV death and MI, the combination of the two and recurrent events. The results for time to first hospitalization for CHF illustrated a statistically significant hazard ratio of 0.59 (95% CI 0.38-0.94, p=0.03). This hazard ratio widened to 0.47 (95% CI 0.23-0.83) when recurrent adjudicated events of hospitalization for CHF were considered. Full results of the prespecified hospitalization for congestive heart failure analysis have been published in the Cardiovascular Diabetology journal<sup>2</sup>. Analysis of an alternative primary endpoint defined as the composite or CV death, non-fatal MI or hospitalization for CHF illustrated a significant hazard ratio of 0.76 (95% CI 0.60-0.95, p=0.02). This finding will be considered for future study design.

Evaluation of the prespecified subgroups illustrated a significant reduction in the primary endpoint for patients with an estimated glomerular filtration rate ("eGFR") below 60 mL/min/1.73m<sup>2</sup>.

Exploratory analysis of patients who were concomitantly administered sodium-glucose cotransporter-2 ("SGLT2") inhibitors, a new class of anti-diabetic therapy, illustrated potential synergy with apabetalone. Analysis of the primary endpoint in patients taking apabetalone with empagliflozin (Jardiance<sup>™</sup>) for at least 30 days illustrated a hazard ratio of 0.34 (95% Cl 0.12-1.01, p=0.05). Further analysis of this synergistic finding and evaluation of additional classes of anti-diabetic therapies is ongoing and appropriate intellectual property has been filed. The Company has filed three patent applications for the observed effects in BETonMACE of apabetalone in combination with the leading anti-diabetes treatments, SGLT2 inhibitors.

The first patent was filed as a provisional patent application in November 2019 and was converted to a Patent Cooperation Treaty ("PCT") application in November 2020. The patent is titled, 'Prevention of Major Adverse Cardiac Events In Diabetes Patients With Low HDL Through Combination Therapy With Sodium-Glucose Co-Transporter-2 Inhibitors And RVX-208' and highlights the key finding that apabetalone treatment led to a significant 65% hazard reduction of MACE and hospitalization for congestive heart failure compared to placebo in patients receiving SGLT2 inhibitors [HR = 0.35 (95% CI, 0.15–0.85; p=0.02)]. The second patent was filed as a provisional patent application in October 2020. The patent is titled, 'Methods For Lowering HbA1c Level With a Combination of a BET Bromodomain Inhibitor And a Sodium Dependent Glucose Transport 2 Inhibitor'. The third patent was filed as a provisional patent is titled, 'Methods For Improving Renal Function With a Combination of a BET Bromodomain

<sup>&</sup>lt;sup>1</sup> jamanetwork.com/journals/jama/fullarticle/2763951

<sup>&</sup>lt;sup>2</sup> cardiab.biomedcentral.com/articles/10.1186/s12933-020-01199-x



Inhibitor And a Sodium Dependent Glucose Transport 2 Inhibitor'. If granted, these patents could provide apabetalone with additional patent exclusivity when given in combination with the SGLT2 inhibitor anti-diabetes treatments which are emerging as the standard of care in high-risk diabetes patients.

The addition of apabetalone to standard of care therapy after ACS in patients with type II DM and low HDL cholesterol, although not reaching statistical significance, showed a strong trend towards a reduction in MACE. Although BETonMACE did not have a sufficiently large sample size to detect a statistically significant relative risk reduction between apabetalone and placebo, it represents provisional clinical evidence that epigenetic modulation of pathologic gene expression by BET protein inhibition may be a potential therapeutic approach to the prevention of MACE and CHF. The results of BETonMACE study validates the need to continue the clinical development of apabetalone in patients with high-risk CVD, an area of critical unmet need.

### **Breakthrough Therapy Designation**

On February 3, 2020, we announced that the FDA had granted BTD for apabetalone in combination with top standard of care, including high-intensity statins, for the secondary prevention of MACE in patients with type 2 DM and recent ACS.

According to the FDA, BTD is intended to expedite the development and review of new drugs to address the unmet medical need in the treatment of serious or life-threatening conditions. The criteria for BTD require preliminary clinical evidence that demonstrates the drug may have substantial improvement on at least one clinically significant endpoint over available therapy. Expedited FDA programs, including BTD, help ensure that therapies for serious conditions are available as soon as it can be concluded that the therapies' benefits justify their risks, considering the seriousness of the condition and the availability of alternative treatment.

A drug that receives BTD is eligible for intensive guidance to ensure a time-efficient drug development program with FDA organizational commitment involving senior managers throughout the development program. Such guidance includes the expedited review of clinical trial design and protocols along with planning to accelerate the manufacturing development strategy of the drug. In the case of apabetalone, BTD will potentially allow for an interim efficacy analysis in a subsequent clinical trial to support regulatory approval thus shortening the overall development time.

### **Chronic Kidney Disease**

Further elucidation from the SUSTAIN and ASSURE clinical trials included a subset of patients with CKD stage 3 or worse, defined as an eGFR below 60 mL/min/1.73m<sup>2</sup>. A total of 48 patients (35 treated with apabetalone and 13 with placebo) were identified in this analysis. This data was published in Kidney and Blood Pressure by Kulikowski et al. 2018. Findings demonstrated by this analysis included:

- Treatment with apabetalone led to a significant reduction in ALP of -14.0% compared to -6.3% in the placebo group (p=0.02); and
- Treatment with apabetalone led to an increase in eGFR of 3.4% (p=0.04 versus baseline) compared to a decrease of 5.8% in the placebo group (p=0.6 versus baseline).

Based on these findings, a phase I pharmacokinetic ("PK") trial was initiated and designed in accordance with our strategy to expand into new indications including kidney disease. The phase I PK study was designed to determine if patients with severe kidney impairment treated with apabetalone had the same favourable PK traits and safety profile as has been illustrated in previous apabetalone trials. Dosing commenced on July 21, 2016 and on November 17, 2016, the Company announced that the primary endpoint had been met. As expected, results showed no significant difference in PK between renal failure patients and age and sex matched controls. These results allowed the Company to proceed with more advanced renal impairment and dialysis trials.

The study also explored acute changes in biomarkers relevant to BET inhibition in subjects with severe renal impairment. This data was published in Kidney International Reports by Wasiak et al. 2018. The data showed remarkable results in reducing inflammatory protein biomarkers in patients with late stage CKD versus healthy control patients. Protein data was collected following a single oral administration of 100mg of apabetalone before and after multiple time points in both cohorts. Protein levels of 288 proteins were significantly different at baseline between the two groups (p<0.05), revealing a highly differential protein signature between CKD patients and controls. Following a single dose administration of apabetalone in the late stage CKD patients, the levels of multiple plasma proteins were significantly changed within 12 hours after dosing, demonstrating a fast onset of drug action. Analysis of the changes in protein levels at the 12-hour time point revealed that, in the late stage CKD patients, several established renal biomarkers such as interleukin 6 ("IL6") and osteopontin, were positively regulated with respect to disease severity and progression. The quick onset of action and improvement of reported CKD risk factors are encouraging for the Company in the planned expansion beyond its cardiovascular program.

On February 23, 2017, we announced the receipt of the final minutes of an in-person Type B meeting with the Cardiovascular and Renal Products Division of the FDA. The purpose of the meeting was to request written comments, recommendations and feedback



on the proposed protocol for a Phase 2a kidney dialysis trial. The primary objective of the study will be to evaluate if treatment with apabetalone in combination with standard of care ("SoC") decreases alkaline phosphatase in comparison to placebo and SoC. In light of guidance received from the FDA, the Phase 2a study design will be separated in two parts. Part A will involve a single-dose pharmacokinetic ("PK") study in eight patients receiving hemodialysis. The PK results from Part A will influence the dose selection for Part B. Part B will be a double-blind, randomized, placebo-controlled, sequential cross-over study with apabetalone, and is designed to evaluate biomarker changes and safety parameters with apabetalone in up to 30 patients with end-stage renal disease (the final stage of chronic kidney disease) treated with hemodialysis. On May 15, 2017, we announced the acceptance, by the Cardiovascular and Renal Products Division of the FDA, of the Company's Investigational New Drug ("IND") application to commence a Phase 2a kidney dialysis trial. The details of the study are described above. We intend to proceed with the Phase 2a clinical trial once we raise the required capital.

The BETonMACE trial included a prespecified subgroup of patients with CKD stage 3 or worse (eGFR below 60 mL/min/1.73m<sup>2</sup>). In participants with CKD, apabetalone treatment was associated with fewer MACE events (13 events in 124 patients [11%] in the apabetalone group compared to 35 events in 164 patients [21%] in the placebo group). The hazard ratio was 0.50 (95% Cl 0.26 – 0.96). In addition, fewer heart failure-related hospitalizations were observed in the apabetalone group (3 events versus 14) with a hazard ratio of 0.48 (95% Cl 0.26 – 0.86). Full results of this prespecified analysis of the BETonMACE study have been published in the Clinical Journal of the American Society of Nephrology. The proportion of CKD patients was 11%, lower than anticipated (possibly because of competing trials) which compares to 25-29% from similar DM post-ACS populations.

The effect of BET inhibition with apabetalone in patients with impaired renal function and the results of BETonMACE CKD subgroup validates the need to continue the clinical development of apabetalone in patients with high-risk CVD and a CKD comorbidity, an area of critical unmet need. With leading experts on our renal clinical and scientific advisory board providing input and guidance, we continue to consider conducting additional clinical trials in this therapeutic area.

## Neurodegenerative Disease

Epidemiological and mechanistic evidence indicate a link between low ApoA-I/HDL, complement overactivation, peripheral inflammation and neurodegenerative diseases such as vascular cognitive dementia. Based on apabetalone's ability to raise plasma ApoA-I/HDL by ApoA-I production and modulate the complement cascade and other factors important for vascular inflammation, we believe apabetalone has the potential to beneficially impact various neurodegenerative diseases. Additionally, DM is known to increase the risk of developing dementia by two-fold while coronary heart disease and congestive heart failure are associated with a 27% to a 60% increased risk of cognitive decline, cognitive impairment or dementia<sup>3</sup>. It has been hypothesized that this increased risk of cognitive impairment is caused by transcriptional disturbances at the epigenetic level.

The BETonMACE trial included an exploratory assessment of cognition in patients over the age of 70 years (n=469). The results from this prespecified cognition assessment were announced on December 2, 2019 and presented on December 5, 2019 at the Clinical Trials on Alzheimer's Disease ("CtAD") Congress 2019. Cognition was assessed in BETonMACE using the Montreal Cognitive Assessment ("MoCA") which was designed as a rapid screening instrument for mild cognitive dysfunction. The test assesses eight different cognitive domains including attention and concentration, executive functions, memory, language, visuoconstructional skills, conceptual thinking, calculations, and orientation. Given that BETonMACE patients are recent ACS, DM patients with low HDL, the assumption is that dementia in this population is largely due to vascular cognitive impairment. In patients with a baseline MoCA below 22 (defined as mild to severe cognitive impairment), apabetalone treatment was associated with significant improvements versus placebo (mean change from baseline of 3.0 units in the apabetalone treatment group compared to 1.2 units in placebo group, p=0.02).

Further exploratory analysis of archived plasma samples planned for additional cognitive dysfunction markers including amyloid burden with plasma AB42/40 ratio, ApoE isoform, YKL40 and Neurofilament light are planned. Early observations on BET inhibition to modulate cognitive function in elderly patients with high-risk cardiovascular disease and DM warrant more research to address this critical unmet need. Preclinical analyses of brain-derived cell lines and animal models of neuroinflammation are currently being pursued. With leading experts on our neurodegenerative clinical and scientific advisory board providing input and guidance, we continue to consider conducting additional clinical trials in this therapeutic area.

## **Clinical Sample Repository of BET Inhibitor Treated Patients**

Our clinical studies have provided us with a repository of samples that enable the interrogation of multiple biomarkers that are affected by apabetalone treatment. We now have archived samples from the phase 3 BETonMACE study in addition to those previously analyzed from the ASSSERT, SUSTAIN and ASSURE phase 2 studies. The data generated from the analysis of these samples is the first and largest integrated dataset of the response of multiple vascular risk markers to an epigenetic drug treatment. Our BET database, which is comprised of hundreds of thousands of data points, provides insight into how epigenetics and select BET inhibition affect target risk

<sup>&</sup>lt;sup>3</sup> Saedi, E. et al. 2016; Baumgart, M. et al. 2015; Umegaki, H. 2014; Munshi, MN. et al. 2017; Zilliox, LA. et al. 2016; Ravona-Springer, R. and Schnaider-Beeri, M. 2011; Wolters, FJ. et al. 2018; Deckers, K. et al. 2017; Zheng, L. et al. 2012; Newman, AB. Et al. 2005; Otta, A. et al. 1999



markers for vascular disease. We continue to add to these important data with ongoing sample analyses to further elucidate the role of epigenetics in this biology and its role in vascular diseases.

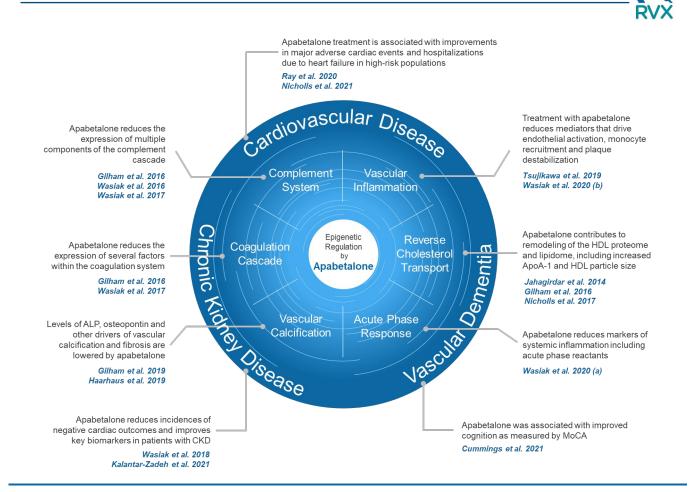
## **Recent Scientific Developments**

Based on our observed MACE reduction data from the pooled post-hoc analysis of the ASSERT, SUSTAIN and ASSURE clinical trials, a number of hypotheses were generated to help investigate the driving factors responsible for the MACE reductions observed. Based on our research and in-depth analysis of the activity of apabetalone in multiple cell types, a combination of BET responsive activities were identified as probable underlying contributors to the MACE reductions observed in the clinic, including, reverse cholesterol transport, acute phase response, vascular inflammation, vascular calcification, complement and coagulation. Downregulation of these pathways by apabetalone may avoid catastrophic vascular events leading to occlusion and death.

We performed microarray-based gene expression analysis on multiple cell types including human hepatocytes, human hepatocarninoma cells, as well as whole blood treated with apabetalone. Results were verified by real-time PCR, a more sensitive and robust method of measuring mRNA expression, as well as using enzyme-linked immunosorbent assay ("ELISAs") to measure protein levels. In addition, protein levels from patients' plasma from the ASSERT, SUSTAIN and ASSURE clinical trials were analyzed. Further analysis of this nature is in progress.

Apabetalone-mediated BET inhibition affects multiple processes important for CVD, CKD and DM. Based on mechanistic data, we believe that apabetalone treatment, or select BET inhibition, attenuates the inflammatory process that contributes to disease initiation and progression. We have recently published data in cell models of vascular inflammation which support the anti-inflammatory effect of apabetalone treatment in endothelial cell lines, and prevention of cellular adhesion that occurs between endothelial cells and monocytes at the site of plaque formation. In addition, the reduction in vascular calcification seen in osteogenic vascular smooth muscle cells treated with apabetalone supports apabetalone's potential in treating CKD and related complications. We have also begun to compile results on the effects of ex vivo treated DM patient blood, with particular focus on the effects of apabetalone on the immune response in relevant cell types. Data collected to date has also supported investigation of apabetalone effects in models of neurodegenerative diseases, due to apabetalone's peripheral anti-inflammatory effects and the known links between CVD, DM and cognitive deficits.

The abovementioned analyses show consistent regulation of markers and pathways known to contribute to CVD, DM, and CKD and are highlighted in the publications below.



BET Responsive Activity	Author	Publication
Acute Phase Response	<u>Wasiak 2020 (a)</u>	Epigenetic Modulation by Apabetalone Counters Cytokine-Driven Acute Phase Response In Vitro, in Mice and in Patients with Cardiovascular Disease
Vascular Inflammation	<u>Tsujikawa 2019</u>	Apabetalone (RVX-208) reduces vascular inflammation in vitro and in CVD patients by a BET-dependent epigenetic mechanism
vascular inflammation	Wasiak 2020 (b)	BET protein inhibitor apabetalone (RVX-208) suppresses pro-inflammatory hyper- activation of monocytes from patients with cardiovascular disease and type 2 diabetes
	<u>Gilham 2019</u>	Apabetalone downregulates factors and pathways associated with vascular calcification
Vascular Calcification	Haarhaus 2019	Apabetalone lowers serum alkaline phosphatase and improves cardiovascular risk in patients with cardiovascular disease
Reverse Cholesterol Transport	Jahagirdar 2014	A novel BET bromodomain inhibitor, RVX-208, shows reduction of atherosclerosis in hyperlipidemic ApoE deficient mice
	Gilham 2016	RVX-208, a BET-inhibitor for treating atherosclerotic cardiovascular disease, raises ApoA- I/HDL and represses pathways that contribute to cardiovascular disease
	Nicholls 2017	Selective BET Protein Inhibition with Apabetalone and Cardiovascular Events: A Pooled Analysis of Trials in Patients with Coronary Artery Disease
Cardiovascular Disease	<u>Ray 2020</u>	Effect of Apabetalone Added to Standard Therapy on Major Adverse Cardiovascular Events in Patients With Recent Acute Coronary Syndrome and Type 2 Diabetes
	Nicholls 2021	Apabetalone and hospitalization for heart failure in patients following an acute coronary syndrome: a prespecified analysis of the BETonMACE study
	Schwartz 2021	Relation of insulin treatment for type 2 diabetes to the risk of major adverse cardiovascular events after acute coronary syndrome: an analysis of the BETonMACE randomized clinical trial



	Wasiak 2018	Benefit of Apabetalone on Plasma Proteins in Renal Disease	
Chronic Kidney Disease	Kalantar-Zadeh 2021	Effect of Apabetalone on Cardiovascular Events in Diabetes, CKD, and Recent Acute Coronary Syndrome	
Vascular Dementia	Cummings 2021	Cognitive Effects of the BET Protein Inhibitor Apabetalone: A Prespecified Montreal Cognitive Assessment Analysis Nested in the BETonMACE Randomized Controlled Trial	
Coagulation Cascade	Gilham 2016	RVX-208, a BET-inhibitor for treating atherosclerotic cardiovascular disease, raises ApoA- I/HDL and represses pathways that contribute to cardiovascular disease	
	Wasiak 2017	Downregulation of the Complement Cascade In Vitro, in Mice and in Patients with Cardiovascular Disease by the BET Protein Inhibitor Apabetalone (RVX-208)	
	Wasiak 2016	Data on Gene and Protein Expression Changes Induced by Apabetalone (RVX-208) in ex vivo Treated Human Whole Blood and Primary Hepatocytes	
Complement System	Gilham 2016	RVX-208, a BET-inhibitor for treating atherosclerotic cardiovascular disease, raises ApoA- I/HDL and represses pathways that contribute to cardiovascular disease	
	Wasiak 2017	Downregulation of the Complement Cascade In Vitro, in Mice and in Patients with Cardiovascular Disease by the BET Protein Inhibitor Apabetalone (RVX-208)	

Recent participation at leading, international scientific conferences included:

- 58th European Renal Association European Dialysis and Transplant Association Congress 2021 (virtual conference): "Apabetalone Downregulates Fibrotic, Inflammatory and Calcific Processes in Renal Mesangial Cells Which May Contribute to Reduced Cardiac Events Observed in CKD Patients" poster presentation
- American Association of Immunologists Immunology 2021 (virtual conference): "Inhibition of Epigenetic Reader BET Proteins by Apabetalone Counters Inflammation in Activated Innate Immune Cells from Fabry Disease Patients Receiving ERT" poster presentation
- European Society of Cardiology Congress 2021 (virtual conference): "Bromodomain and extraterminal (BET) protein inhibitor, apabetalone, reduces ACE2 expression and attenuates SARS-CoV-2 infection in vitro" poster presentation
- American College of Cardiology's Scientific Session 2020 (virtual congress): "Epigenetic BET Reader Inhibitor Apabetalone (RVX-208) Counters Proinflammatory Aortic Gene Expression In a Diet-Induced Obesity Mouse Model" poster presentation and "Apabetalone (RVX-208) Reduces ACE2 Protein Abundance And Prevents SARS-CoV-2 Spike Protein Binding To Human Lung Cells, A MOA That Could Attenuate Viral Entry" poster presentation
- FSHD International Research Congress 2021 (virtual conference): "Apabetalone, a Clinical-stage Cardiovascular Disease Drug, Inhibits DUX4 Expression in FSHD Cells" poster presentation
- American Society of Nephrology, Kidney Week 2021 (virtual conference) "Apabetalone Downregulates Fibrotic, Inflammatory and Calcific Processes in Renal Mesangial Cells: Mechanism for Reduced Cardiac Events in CKD Patients" poster presentation
- Alzheimer's Association International Conference (AAIC) 2021: "Favorable Cognitive Effects of the BET Protein Inhibitor Apabetalone in Patients 70 and Older" poster presentation
- American Heart Association Scientific Sessions 2021 (virtual conference): "Epigenetic BET Reader Inhibitor Apabetalone (RVX-208) Counters Proinflammatory Aortic Gene Expression In A Diet Induced Obesity Mouse Model" poster presentation
- Clinical Trials on Alzheimer's Disease (CTAD) Congress 2021: "BET-Inhibition by Apabetalone and Cognitive Effects: A Pre-Specified MoCA Analysis Nested in the BETonMACE Randomized Controlled Trial" poster presentation and "The Epigenetic Modulator Apabetalone Decreases Neuroinflammation in Blood Brain Barrier Cell Models and LPS-Treated Mice" oral presentation
- 16th International Conference on Alzheimer's & Parkinson's Diseases (AD/PD) 2022: "Apabetalone BET-Inhibition and Cognition: A MOCA Assessment in the Phase 3 CVD-Outcomes Trial BETonMACE" oral presentation

Through participation at major conferences and events, we continue to highlight apabetalone's ability to regulate multiple biological pathways that underlie and contribute to CVD, diabetes, and neurodegenerative diseases.



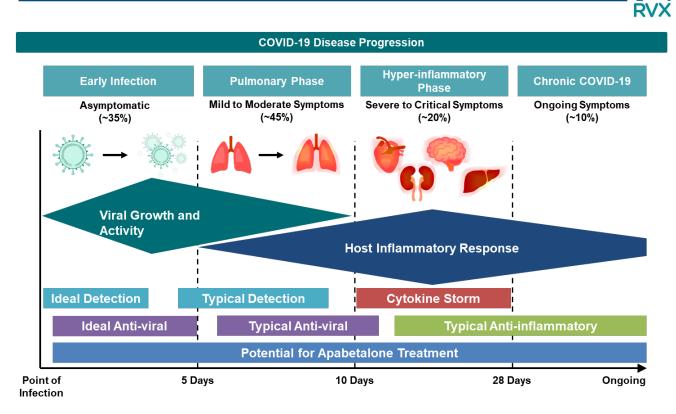
## Additional Indications and Potential Orphan Disease

## COVID-19

The severe acute respiratory syndrome coronavirus 2 (COVID-19) emerged in late 2019 and spread globally, prompting an international effort to accelerate not only the development of a vaccine but also the search for potential treatment options. The scientific understanding of how SARS-CoV-2, the virus responsible for COVID-19, enters host cells and replicates, has increased drastically and research targeting how to impede this mechanism continues to expand. Recent evidence indicates that apabetalone may have a dual mechanism of action to effectively treat COVID-19 by impeding viral entry into host cells and hyper-inflammatory responses that exacerbate the infection. Angiotensin converting enzyme 2 (ACE2), the primary cell surface receptor used by SARS-CoV-2 to enter host cells, is transcriptionally downregulated by apabetalone by 40-90% in various cell lines. Decreasing ACE2 transcripts lowers the total and surface abundance of ACE2 protein in vitro by 60%; circulating ACE2 protein in the blood of phase 2 CVD clinical trial patients treated with apabetalone also declines. This reduction in ACE2 receptor abundance inhibits the binding of recombinant SARS-CoV-2 spike protein to the host cell surface by 60% and prevents live viral infection by up to 90%. Apabetalone also decreases transcripts and protein abundance of DPP4, a potential co-factor that facilitates SARS-CoV-2 infection of host cells.

COVID-19 hyper-inflammatory viral responses can compromise the function of multiple organs; apabetalone may stifle this cytokine storm and long-term COVID. Indeed, ex vivo treatment of monocytes isolated from diabetic CVD patients with apabetalone diminishes their pro-inflammatory phenotype and hyper responsiveness to IFNy stimulation. Apabetalone also counters cytokine driven acute phase response in cells and in treated mice as well as reduces the levels and activity of the complement cascade. These preclinical results bear out in the clinic, where apabetalone treatment lowers the abundance of multiple inflammatory markers in patient plasma. Accordingly, apabetalone is a novel, safe, clinical trial ready candidate for the prevention and treatment of COVID-19 based on its capacity to lower SARS-CoV-2 infection and combat hyper-inflammatory responses. Our SARS-CoV-2 program has involved both preclinical experiments and a proof-of-concept open label phase 2 clinical trial. Preclinical research is ongoing and has been published in various high-impact peer-reviewed journals including Cell. Our phase 2 clinical trial was assessing the safety and effect of oral apabetalone in hospitalized subjects with COVID-19 infection. In May 2022, we announced that the U.S. Food and Drug Administration had granted us a Type C meeting in early August 2022 to review the clinical trial protocol for our Phase 3 study of apabetalone in highrisk COVID-19 outpatients. In response to the transformation of the COVID-19 pandemic, advancement to the Phase 3 will target outpatients with multiple risk factors for serious outcomes, focusing where apabetalone has the greatest potential to impact patient outcomes. The Phase 3, multicenter, randomized clinical trial, entitled: A Double-Blind Placebo Controlled Study to Assess the Efficacy and Safety of Oral Apabetalone in Elderly Subjects with COVID-19 Infection and High Risk for Severe Illness and to Explore the Potential to Limit Long-Term Symptoms (CORAL), will evaluate the safety and efficacy of apabetalone in preventing serious health outcomes in high-risk COVID-19 patients. Study site selection is currently underway, with sites expected in the United States, Canada, and the Middle East. We will conclude our Phase 2 trial in hospitalized COVID-19 patients early, thus focusing its resources on the advanced Phase 3 program.

BET Responsive Activity	Author	Publication		
COVID-19	<u>Mills 2021</u>	BET inhibition blocks inflammation-induced cardiac dysfunction and SARS-CoV-2 infection		
	<u>Gilham 2021</u>	Bromodomain and Extraterminal Protein Inhibitor, Apabetalone (RVX-208), Reduces ACE2 Expression and Attenuates SARS-Cov-2 Infection In Vitro		



Apabetalone's unique dual-mechanism gives it the potential to benefit patients throughout COVID-19 disease progression, making it less reliant on ideal detection than current therapies

#### **HIV Latency**

On June 7, 2018, we announced that a publication titled, "The BET bromodomain inhibitor apabetalone induces apoptosis of latent HIV-1 reservoir cells following viral reactivation," was published in Nature's Acta Pharmacologica Sinica. The publication by Zhang et al. demonstrated apabetalone's abilities to expose and reactivate latent HIV-1 reservoirs, induce HIV-1 latent cell death, and reduce the side effects of standard of care (cART combination antiretroviral therapy). These conclusions suggest that BET inhibitors, such as apabetalone, are a group of leading compounds for potentially unmasking HIV-1 latency to allow for viral eradication.

#### **Potential Orphan Disease Indications**

Based on the literature and knowledge of epigenetics and BET inhibition, our analysis of apabetalone-treated human plasma and our recent proteomics assessment, new pathways, genes and biomarkers known to play a role in orphan diseases have been investigated. New data generated in our research laboratory has demonstrated that BET inhibition by apabetalone has effects on multiple biological pathways that underlie disease pathology. Based on these recent advancements and scientific knowledge gained, we intend to continue to expand our research and development to explore orphan diseases such as PAH. We will perform detailed commercial and scientific analysis in all these opportunities to build the best possible rationale for advancing any of these opportunities forward. In addition to apabetalone, preclinical testing with other BET inhibitors from within our compound library has demonstrated similar effects on important markers known to play a role in orphan diseases. These compounds are under consideration as follow-on compounds.

#### Orphan Disease Fact Sheet

- Defined as rare diseases and disorders.
- o Affect fewer than 200,000 people in the US.
- An estimated 7,000 rare diseases have been identified affecting over 30 million patients in the US.
- 400 drugs and biologics have been FDA approved.
- Due to the difficulty in recovering the therapeutic development costs associated with small patient segments, the Orphan Drug Act (ODA) was introduced in 1983 to foster research into rare diseases.
- The ODA provides for granting special status to a drug or biological product to treat a rare disease. This status is referred to as orphan designation.
- Orphan designation allows the drug sponsor to benefit from incentives for the development of these products.
- Incentives include tax credits on clinical research, technical assistance during new drug application (NDA) filing and exclusivity of 7 years after the marketing approval is granted. Source: NIH Rare Diseases Clinical Research Network Fact Sheet

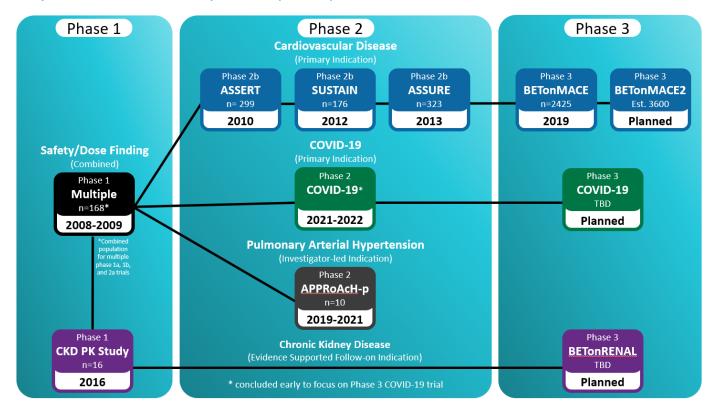


### Pulmonary Arterial Hypertension

On March 18, 2019, we announced the advancement of a project led by academic collaborators at Quebec Heart and Lung Institute, Laval University, to research the clinical potential of apabetalone as a potential therapy for PAH. An article titled: "Multicenter Preclinical Validation of BET Inhibition for the Treatment of Pulmonary Arterial Hypertension" was published in the high-impact, peerreviewed medical journal, American Journal of Respiratory and Critical Care Medicine, published by the American Thoracic Society. This article presented our collaborative work with top research groups in Canada and the Netherlands and illustrated the beneficial effects of apabetalone treatment in several animal and cell models of PAH. A clinical pilot study, APPRoAcH-p, commenced in September 2019 to evaluate the potential use of apabetalone, assessing patient safety and effects on key biomarkers of PAH. The study was completed in late 2021, finding that apabetalone was well tolerated by study participants and observing improvements in key hemodynamic outcome measures, including pulmonary vascular resistance, cardiac output, and stroke volume. These findings were also published in the American Journal of Respiratory and Critical Care Medicine.

## Fabry Disease

Our clinical program in Fabry Disease is supported from in-house research and development. A preclinical, ex vivo study, examining the effect of apabetalone on primary blood cells taken directly from Fabry Disease patients, is currently underway. On May 30, 2017, we announced that Health Canada, Therapeutic Products Directorate ("TPD"), approved our request to proceed with a clinical trial with our lead compound apabetalone in patients with Fabry disease. This study is an open-label, exploratory clinical study to assess the patient safety and effect on key biomarkers of apabetalone in subjects with Fabry disease for up to 16 weeks. The primary objective of the study is to evaluate the safety and tolerability of apabetalone in patients with Fabry disease. Secondary objectives include evaluating the effect of apabetalone in subjects with Fabry disease as determined by change in key biomarkers including alkaline phosphatase ("ALP"), high-sensitivity C-reactive protein (hs-CRP), and other well-known markers for chronic kidney disease. The study population will consist of two cohorts: Cohort 1: Patients with Fabry disease receiving enzyme replacement therapy ("ERT") and Cohort 2: Patients with Fabry disease experience various heart, kidney, and dermatological complications with stroke, heart disease and kidney complications being the top causes of mortality. Current medications approved for Fabry disease are not sufficient and there remains a large unmet need.



## Completed, Current and Planned Apabetalone (RVX-208) Clinical Trials

## **Corporate Developments**

### Private placements

In March 2022, we issued 4,727,192 equity units at CAD\$0.48 per unit pursuant to a private placement for gross proceeds of \$1.8 million (CAD\$2.3 million). Each equity unit consists of one common share and one common share purchase warrant. Each warrant is exercisable at a price of CAD\$0.50 per underlying common share for a period of either three or five years from the closing of the private placement.

In April 2022, we issued 400,000 equity units at CAD\$0.48 per unit pursuant to a private placement for gross proceeds of \$0.2 million (CAD\$0.2 million). Each equity unit consisted of one common share and one common share purchase warrant. Each warrant is exercisable at a price of CAD\$0.50 per underlying common share for a period of three years from the closing of the private placement.

In June 2022, we issued 2,090,454 equity units (including 1,923,787 equity units issued to a relative of the Chief Executive Officer / Chairman of the Company) at CAD\$0.30 per unit pursuant to a private placement for gross proceeds of \$0.5 million (CAD\$0.6 million). Each equity unit consisted of one common share and one common share purchase warrant. Each warrant is exercisable at a price of CAD\$0.30 per underlying common share for a period of three years from the closing of the private placement.

Subsequent to June 30, 2022, we issued 10,486,416 equity units at CAD\$0.24 per unit pursuant to a private placement for gross proceeds of \$2.0 million (CAD\$2.5 million). Each equity unit consists of one common share and one common share purchase warrant. Each warrant is exercisable at a price of CAD\$0.30 per underlying common share for a period of five years from the closing of the private placement.

In October 2020, we entered into a stock purchase agreement for a private placement of 10,560,000 equity units at a price of CAD\$1.25 per unit for gross proceeds of \$10.0 million (CAD\$13.2 million). It has been determined that the private placement will not proceed.

## Hepalink Convertible Debenture

On May 13, 2021, we closed a \$6.0 million secured convertible debenture (the "Debenture") with a subsidiary of Hepalink. The Debenture bears interest at 10% per annum. During the six months ended June 30, 2022, the maturity date of the Debenture, and the corresponding payment date of interest thereon, were both extended by one year from May 13, 2022 to May 13, 2023. The amendment was accounted for as a debt modification. A modification gain of \$0.4 million, related to the extension of the maturity date, was recognized within accretion on the statement of comprehensive loss. Incremental debt issuance costs of \$0.5 million (including \$0.5 million of incremental fair value for the derivative liability) were added to the carrying value of the convertible debenture.

Hepalink may elect to convert the principal amount of the Debentures and accrued and unpaid interest thereon into common shares of the Company at a conversion price equal to the lesser of CAD\$0.93 per share and the 5-day volume weighted average trading price of the common shares on the date of conversion. The Company granted Hepalink a security interest in all of its assets, including its patents and other intellectual property, as security for its obligations under the Debenture. In addition, Hepalink received 300,000 common share purchase warrants exercisable for a period of four years from the grant date at a price of CAD\$0.93 per share.

## Licensing

On July 8, 2015, we entered into a licensing agreement with Hepalink. Under the terms of the agreement, Hepalink has the exclusive rights to distribute and market apabetalone in China, Hong Kong, Taiwan and Macau (the "Territories"), for all indications.

The license between us and Hepalink provides for certain milestone payments based on net sales of RVX-208 in the Territories. The annual sales milestones range from 500 million renminbi ("RMB") to 10 billion RMB (US\$79 million to US\$1.6 billion, incorporating the period end spot exchange rate), with Resverlogix being eligible to receive sales-based milestone payments from Hepalink ranging from US\$5 million to US\$90 million. In addition, Hepalink shall pay a royalty of 6% of annual net sales of RVX-208 in the Territories. The royalty is subject to an adjustment mechanism that may reduce the royalty rate to a minimum of 4% in the event that certain annual sales milestones are achieved and applicable regulatory authorities in the Territories reduce the approved selling price of RVX-208. Hepalink will be responsible for all clinical and development costs in the Territories, including a patient population that was included in the Company's Phase 3 BETonMACE trial. We are contractually obligated to pay a fee to the financial advisor involved with the transaction equal to 3.5% on the first \$10.0 million of payments, if any, received from Hepalink pursuant to the license, and 2.5% on amounts above \$10.0 million, up to a maximum of \$1.0 million of fees. As at June 30, 2022, these potential payments do not satisfy the criteria for recognition as a liability.

On October 23, 2017, we entered into a Right of First Refusal Agreement with Hepalink USA Inc. ("Hepalink USA"), a subsidiary of Hepalink. Under the Agreement, Hepalink USA was granted a right of first refusal in connection with the licensing of the right to develop, manufacture, and commercialize pharmaceutical products containing RVX-208 (apabetalone) in the United States until April 15, 2019. Hepalink USA paid CAD\$8.0 million to us in consideration for the right of first refusal granted (the "Fee"). Pursuant to the Agreement,



if Resverlogix and Hepalink USA entered into a license agreement with respect to the US Licensing Rights, the Fee would have been credited against any payment obligations of Hepalink USA thereunder. Otherwise, the Fee was refundable, in whole or in part, until termination of the Agreement. The Unearned Licensing Rights Fee was recognized as a current liability from the commencement of the Agreement until the April 15, 2019 termination date (at which time it was no longer refundable), and at which time the Fee was considered earned, and recorded as other income.

The July 2015 license agreement between us and Hepalink was amended effective June 17, 2022 such that we agreed to pay up to CAD\$8.0 million of clinical development costs associated with apabetalone, including a global Phase 3 clinical trial (which we intend to perform in any event), in the Territories and if the costs incurred by Resverlogix after May 1, 2020 and up to December 31, 2023 total less than CAD\$8 million, then Resverlogix and Hepalink shall negotiate a mutually-agreeable timeframe regarding any difference, in principle by not later than June 30, 2024.

On January 8, 2018, we entered into a licensing agreement with Medison Pharma Ltd. Under the terms of the agreement, Medison has the exclusive rights to distribute and market apabetalone in Israel. Resverlogix is eligible to receive from Medison, ascending double digit royalties based on future net sales of the product in the licensed territory. Medison will be responsible for all regulatory, sales and marketing costs for apabetalone in the licensed territory.

## **Commercialization Partnership with EVERSANA**

In June 2021, we entered into a partnership with EVERSANA Life Science Services, LLC ("EVERSANA"). EVERSANA is supporting the planned commercialization of apabetalone for the treatment of COVID-19 in the United States and Canada as Emergency Use Authorization and/or a New Drug Application or equivalent if issued or approved in these two countries. EVERSANA is providing fully integrated commercialization services including market access, agency services, clinical and commercial field teams, medical science liaisons, channel management, patient services, health economics and outcomes research, and compliance. For providing its services, EVERSANA shall be entitled to receive fees (of which 25% (possibly increasing to up to 50% in the future, at EVERSANA's discretion) shall be initially deferred and are due when we generate subsequent COVID-19-related sales of apabetalone) and profit sharing in the amount of 3.0 - 4.5% of apabetalone sales associated with COVID-19 in the United States and Canada during the five-year term of the partnership (commencing upon commercial launch). The partnership may be expanded to include additional global markets, should additional approvals be issued.

In April 2022, Resverlogix and EVERSANA expanded its partnership to include cardiovascular and pulmonary arterial hypertension indications (the "Amendment"). In connection with the Amendment, if Resverlogix and EVERSANA have not launched a product by July 1, 2022, the Company will make monthly payments to EVERSANA, commencing in July 2022, equal to 50% of the deferred fees for the corresponding month twelve months prior. Resverlogix has not yet made any such payments.

During the six months ended June 30, 2022, EVERSANA completed pre-commercialization activities in the amount of \$3.4 million, with 25% (and up to 50% in the future) of the fees earned (\$0.8 million) being deferred. A total discount of \$0.5 million on the precommercialization fees incurred in the six months ended June 30, 2022 has been recognized as an offset to the long-term deferred fees liability and to pre-commercialization expenses to reflect the financing component of the deferred fees. The April 2022 Amendment described above was accounted for with a reclassification of 50% of the deferred fees to current Trade and other payables (as the fees will become due within the twelve months following) and an extinguishment of the unamortized discounts incurred prior to April 2022 (\$0.6 million), resulting in \$0.6 million of unamortized discounts being recognized within accretion in the period. A new discount of \$0.3 million was recognized to reflect the financing component of the remaining 50% of deferred fees still classified as Other long-term liability. The discount will be accreted over the term that is projected until settlement. \$1.3 million of deferred fees (\$1.0 million, net of the \$0.3 million discount) is included as Other long-term liability on the statement of financial position and are due when the Company generates subsequent COVID-19-related sales of apabetalone.

#### **Royalty Preferred Shares**

On July 2, 2015, the Company's articles were amended to make certain changes to the dividend entitlement of holders of royalty preferred shares. The amendments to the Royalty Preferred Shares limit the dividends payable to holders of royalty preferred shares in a particular period to amounts received by us during that period. We determined that this amendment was necessary in the course of negotiating the terms of the license agreement with Hepalink.

On December 20, 2016, the Company's articles were further amended to make certain additional changes to the dividend entitlement of holders of royalty preferred shares. The amendments provided that the holder of royalty preferred shares is entitled to a dividend, calculated based on a percentage of net revenue earned from the sale or licensing of any pharmaceutical product in which Resverlogix holds an intellectual property right, and removed the requirement that the pharmaceutical product elevate plasma levels of certain lipoprotein associated with a decreased risk of atherosclerosis and coronary heart disease. We determined that the amendments were necessary and appropriate based on detailed analysis of the results of our phase 2 clinical program.

Further information regarding the change in the fair value of the royalty preferred shares is provided on page 19.

				nonths ended une 30,		Six months ended June 30,		
(in thousands of US dollars unless otherwise noted)		2022		2021		2022		2021
Expenses	\$	2,037	\$	3,402	\$	7,985	\$	5,046
Finance (income) costs		(1,638)		(799)		(5,258)		(2,467)
Loss before income taxes		399		2,603		2,727		2,579
Income taxes		4		6		8		10
Net and total comprehensive loss	\$	403	\$	2,609	\$	2,735	\$	2,589
Net loss per share								
Basic	\$	0.00	\$	0.01	\$	0.01	\$	0.01
Diluted		0.00		0.01		0.01		0.01

## Results of Operations for the Three and Six Months Ended June 30, 2022 and 2021

## **Research and Development**

In addition to the costs associated directly and indirectly with clinical programs, research and development includes other product development costs such as drug development and manufacturing, pharmacology, toxicology and other studies, and costs associated with discovery research. R&D expenses also include salaries and benefits for R&D staff, consulting fees, supplies and general laboratory operating expenses.

During the three and six months ended June 30, 2022, gross R&D expenditures totaled \$1.1 million and \$2.7 million, respectively (2021 – \$1.5 million and \$2.4 million, respectively). Clinical costs in the three and six months ended June 30, 2022 totaled approximately \$0.2 million and \$0.7 million, respectively (2021 – \$0.3 million and \$0.4 million, respectively). The current period includes costs for our Phase 2 COVID-19 trial. The prior period clinical costs include start up costs for the Phase 2 COVID-19 trial and sample storage fees related to the BETonMACE clinical trial.

Research and development compensation and related costs (related primarily to our research, nonclinical and clinical teams) for the three and six months ended June 30, 2022 were approximately \$0.4 million and \$0.8 million, respectively (2021 – \$0.4 million and \$0.8 million, respectively).

During the three and six months ended June 30, 2022, chemistry costs (comprised of CMC, or chemistry, manufacturing and controls) totaled \$0.02 million and \$0.1 million, respectively (2021 – \$0.1 million and \$0.1 million, respectively). The costs in both periods are comprised primarily of storage and shipping fees of clinical supplies (drug product) being used in our research and development. The current period included the cost of a portion of the drug product that was utilized in our Phase 2 COVID-19 trial.

During the three and six months ended June 30, 2022, nonclinical costs were approximately \$0.04 million and \$0.08 million, respectively (2021 – \$0.03 million and \$0.08 million, respectively). Nonclinical costs include research, pharmacology, toxicology and DMPK (drug metabolism, and pharmacokinetics) costs including those related to the potential broadening of indications.

## Pre-commercialization, General and Administrative

General and administrative expenses includes compensation and related costs, operating costs not directly involved in research and development, as well as professional fees for legal, audit, communications, medical affairs and business development services.

During the three and six months ended June 30, 2022, general and administrative expenditures totaled \$0.9 million and \$5.4 million, respectively (2021 - \$1.9 million and \$2.6 million, respectively). The increase in the current period was due primarily to the inclusion of \$3.4 million of pre-commercialization activities completed by EVERSANA (a net \$2.9 million with the recognition of a total of \$0.5 million in discounts discussed above), related to the planned commercialization of apabetalone for the treatment of COVID-19 in the United States and Canada as Emergency Use Authorization and/or a New Drug Application or equivalent if issued or approved in these two countries.

## Share-based Payments

Share-based payments are included in research and development and general and administrative rather than being presented separately in the statements of comprehensive income.

During the six months ended June 30, 2022, we recognized share-based payments of \$1.7 million (2021 – \$1.8 million). The expense recognized in a given period reflects the fair value of past and newly-granted stock options outstanding during the period, and is



impacted by factors such as vesting and fluctuations in share price. Share-based payments are a non-cash expense which does not impact operating cash flows.

During the six months ended June 30, 2022, we granted 740,000 stock options with a weighted-average exercise price of CAD\$0.58 and a weighted-average fair value of \$0.24 per option (2021 – 450,000 stock options with a weighted-average exercise price of CAD\$0.91 and a weighted-average fair value of \$0.36 per option), and we granted 2,887,700 restricted stock units (2021 – 2,109,200 restricted stock units).

## Change in Fair Value of Warrant Liability

We have issued warrants in connection with various securities offerings. Warrants issued as part of an equity unit, or in connection with a debt financing, with an exercise price denominated in a foreign currency are reported as a liability until they are exercised or expire. These warrants are adjusted to fair value at each reporting period and any change in fair value between reporting periods is recorded in the statement of comprehensive loss (income).

During the three and six months ended June 30, 2022, we recognized a \$1.7 million gain and a \$2.3 million gain, respectively, on the change in the fair value of our warrant liability (2021 – \$1.0 million gain and \$2.6 million gain, respectively). The changes in fair value were based on several factors including changes in the market price of our shares from CAD\$0.51 on December 31, 2021 to CAD\$0.25 on June 30, 2022 and from CAD\$0.94 on December 31, 2020 to CAD\$0.84 on June 30, 2021, as well as decreases in the remaining terms of the various series of warrants, and changes in estimated future volatility of our common shares. Gains and losses resulting from the revaluation of warrant liability are non-cash and do not impact our cash flows.

## **Change in Fair Value of Royalty Preferred Shares**

During the six months ended June 30, 2022, we recognized a \$3.9 million gain on the change in the estimated fair value of our royalty preferred shares (2021 – \$0.3 million gain). For fair value measurement purposes, the royalty preferred shares liability has been categorized within level 3 of the fair value measurement hierarchy. The estimated fair value of the royalty preferred shares is based on management's judgments, estimates and assumptions which include significant unobservable inputs including the timing and amounts of the Company's discounted future net cash flows. The estimate incorporates the following assumptions: a cumulative probability rate of generating forecasted future cash flows of 42% as at June 30, 2022 (42% as at December 31, 2021) reflecting in each case, among other factors, our clinical results, in particular the results of BETonMACE, and communication with the FDA (including Breakthrough Therapy Designation) and other regulatory bodies; a discount rate of 25.2% as at June 30, 2022 (December 31, 2021 – 23.7%); projected commencement of revenue between mid 2026 and early 2027 (based on projected clinical development paths across various jurisdictions, which is based in part on securing the requisite funding from a partnership or other source(s) of capital in 2022), as at June 30, 2022 (as at December 31, 2021 – between early 2026 and late 2026); and projected apabetalone market shares percentages and projected product pricing. The estimated fair value of our royalty preferred shares in the current period was affected by the change in the projected commencement of revenue and an increase to the discount rate during the six months ended June 30, 2022, offset by the passage of time (to future cash flows based on the estimated timing and commencement of revenue).

The estimated fair value of the royalty preferred shares is subject to significant volatility. Small changes in the aforementioned assumptions may have a significant impact on the estimated fair value of the royalty preferred shares. For instance, holding all other assumptions constant: a 1% increase in the discount rate would result in a \$3.5 million decrease in the estimated fair value of the royalty preferred shares; assuming commencement of revenue one year later would result in a \$12.0 million decrease in the estimated fair value of the royalty preferred shares; and a 1% increase in the probability rate of generating forecasted future cash flows would result in a \$1.4 million increase in the estimated fair value of the royalty preferred shares.

## Change in Fair Value of Derivative Liability

On May 13, 2021, we closed the US\$6.0 million Debenture with Hepalink. The Debenture bears interest at 10% per annum. On April 1, 2022, the maturity date of the Debenture, and the corresponding payment date of interest thereon, were both extended by one year from May 13, 2022 to May 13, 2023. Hepalink may elect to convert the principal amount of the Debentures and accrued and unpaid interest thereon into common shares of the Company at a conversion price equal to the lesser of CAD\$0.93 per share and the 5-day volume weighted average trading price of the common shares on the date of conversion. The secured convertible debenture is a hybrid instrument consisting of a financial instrument and an embedded derivative, being the conversion option. The embedded derivative is separated from the host contract and accounted for separately as the economic characteristics and risks of the host contract and the embedded derivative are not closely related. The conversion option contains a variable conversion price and the conversion price is denominated in a foreign currency. As a result, conversion will result in a variable number of our shares being issued at conversion; as such, the conversion feature has been classified as a derivative liability at fair value through profit or loss.

During the six months ended June 30, 2022, we recognized a net \$4 thousand loss on the change in estimated fair value of the derivative liability (related to the conversion option on the Hepalink convertible debenture). The net \$4 thousand loss on change in



estimated fair value of derivative liability during the six months ended June 30, 2022 relates to a \$0.1 million decrease in the fair value of the conversion option derivative of the Hepalink convertible debenture between December 31, 2021 and the April 1, 2022 maturity date extension amendment, and a \$0.1 million increase in the fair value on the conversion option derivative after the maturity date extension up to the June 30, 2022 reporting date. Gains and losses resulting from the revaluation of derivative liability are non-cash and do not impact our cash flows.

### **Interest and Accretion**

Interest and accretion for the three and six months ended June 30, 2022 and 2021 relate to the Hepalink Debenture noted above and the accretion of the discounts related to the EVERSANA deferred fees. The Debenture bears interest at 10% per annum. During the three and six months ended June 30, 2022, interest on the Debenture totaled \$0.2 million and \$0.3 million, respectively (2021 – \$0.1 million and \$0.1 million, respectively).

Accretion of the debt issuance costs and the EVERSANA deferred fees discounts totaled \$0.4 million and \$0.6 million, respectively (2021 – \$0.1 million and \$0.1 million, respectively). During the six months ended June 30, 2022, the maturity date of the Debenture, and the corresponding payment date of interest thereon, were both extended by one year from May 13, 2022 to May 13, 2023. The amendment was accounted for as a debt modification. A modification gain of \$0.4 million, related to the extension of the maturity date, was recognized within accretion on the statement of comprehensive loss. The EVERSANA April 2022 Amendment described above was accounted for with a reclassification of 50% of the deferred fees to current Trade and other payables (as the fees will become due within the twelve months following) and an extinguishment of the unamortized discounts incurred prior to April 2022 (\$0.6 million), resulting in \$0.6 million of unamortized discounts being recognized within accretion in the period.

## Liquidity and Capital Resources

### Cash

As at June 30, 2022, we had \$42 thousand of cash and \$13.5 million of current trade and other payables. Our cash and liquidity is described further under "Liquidity".

## Liquidity

As at June 30, 2022, we had \$42 thousand of cash. We need to raise additional capital to fund research, development and corporate activities over the next year which include continued clinical development or we may be forced to cease operations. As at June 30, 2022, we were committed to pay \$13.5 million of current trade and other payables, \$1.4 million for research and development commitments, and \$0.5 million of lease liabilities over the next twelve months. Furthermore, our \$6.0 million debenture with Hepalink is due on May 13, 2023.

Subsequent to June 30, 2022, the Company raised \$2.0 million. Our cash as at June 30, 2022, in combination with the \$2.0 million raised subsequent to June 30, 2022, is not sufficient to fund our contractual commitments and/or our planned business operations over the next year.

We are in active discussions and have, in certain cases, entered into cooperation agreements with multiple parties in respect of funding including various potential clinical trials.

We will have to raise additional capital. If we are not able to raise capital, we may be forced to cease operations. These conditions result in a material uncertainty which may cast significant doubt on our ability to continue as a going concern. Refer to Note 3 to our condensed interim consolidated financial statements for the three and six months ended June 30, 2022 for our going concern note disclosure.

We have not complied fully with the payment terms associated with certain amounts owing to certain vendors. Until we fully satisfy our obligations, it is possible that the vendors could assert that we are in default and could pursue any remedies available to them.

We are a development stage company; our primary capital requirements relate to funding research and development activities, including preclinical and clinical trials, and for general working capital purposes. Our operations have been financed in recent years primarily through the sale of common shares or units (consisting of common shares and warrants) and secured indebtedness.

Our primary objective when managing capital is to ensure we have sufficient funds available to carry out our research, development and commercialization programs.

We will continue to pursue and examine both non-dilutive and dilutive arrangements including co-development, licensing, rights or other partnering arrangements, procurement arrangements, private placements and/or public offerings (equity and/or debt). However, there is no assurance that these arrangements will be completed.



We will also require additional capital to fund research, development and corporate activities beyond the next year. We will continue to explore alternatives to generate additional cash including raising additional equity and product licensing; however, there is no assurance that these initiatives will be successful. We intend to raise capital from equity and/or debt offering and/or partnering in the future.

As described herein, we intend to perform additional human clinical trials and such trials and regulatory approvals may require significant expenditures by us and likely require several years to complete. We may not generate operating cash inflows in the foreseeable future, and we will require additional financial resources to ensure that we have sufficient capital to fund our long-term research, development and corporate activities. Our long-term capital requirements will depend on, among other considerations, whether we commence additional clinical trials, the size of any trials, and whether the trials are funded entirely by us or, partially or entirely, by a strategic partner.

We continuously investigate and assess financing alternatives and expect to be able to raise additional capital to fund our capital requirements. However, there is no assurance that initiatives to raise additional capital will be successful. If we are unable to raise additional capital, we may need to defer or discontinue some or all of our research and development activities.

## Cash Flows Used In Operating Activities

Cash flows used in operating activities for the six months ended June 30, 2022 totaled \$2.3 million (2021 – \$5.3 million), comprised primarily of \$6.3 million of operating expenditures and a net increase of trade and other payables of \$4.3 million in the period.

## **Cash Flows from Financing Activities**

During the six months ended June 30, 2022, cash flows provided by financing activities totaled \$2.6 million (2021 – \$9.2 million). Cash flows from financing activities during the six months ended June 30, 2022 included issuing a total of \$2.5 million (CAD\$3.1 million) of equity units pursuant to private placements (2021 – \$3.9 million (CAD\$4.8 million) of equity units issued pursuant to private placements and \$6.0 million pursuant to the Debenture), offset by \$0.4 million of lease liability repayments (2021 – \$0.3 million). During the six months ended June 30, 2022, 101,356 warrants were exercised for proceeds of \$0.1 million.

## **Cash Flows Used In Investing Activities**

During the three months ended March 31, 2022, additions to intangible assets (patent-related costs), along with net payments for past additions, totaled \$0.2 million (2021 – \$0.7 million).

## **Commitments and Contingencies**

As at June 30, 2022, the Group is committed to expenditures over the next twelve months of \$1.4 million (December 31, 2021 – \$1.6 million) under various research and development contracts.

As at June 30, 2022, the Group is party to a commercialization partnership where corresponding estimated (discretionary) precommercialization activities over the next twelve months total up to approximately \$10 million (December 31, 2021 – between \$8.6 million and \$12.2 million).

The Group is, or was previously, party to agreements with contract research organizations and central laboratories that conducted clinical trials. The Group relies on contract research organizations and a contract laboratory to conduct its clinical trials in compliance with regulations and standards, commonly referred to as good clinical practices, for conducting, monitoring, recording and reporting the results of clinical trials, to ensure that data and reported results are accurate and that the clinical trial participants are adequately protected. In addition, the Group relies on global drug manufacturers to produce the active pharmaceutical ingredient ("API") and the drug product for patient use.

The completion of certain remaining activities associated with the BETonMACE trial could potentially be delayed, potentially preventing the Group from obtaining regulatory approvals necessary for the commercialization of apabetalone. Similarly, if the Group's contracts with drug manufacturers were cancelled or delayed, manufacturing of API and drug product in the quantities and manner required by regulatory authorities may be delayed and development, approval and commercialization of apabetalone may be delayed.

The July 2015 License Agreement between us and Hepalink was amended effective June 17, 2022 such that we agreed to pay up to CAD\$8.0 million of clinical development costs associated with apabetalone, including a global Phase 3 clinical trial (which we intend to perform in any event), in the Territories and if the costs incurred by Resverlogix after May 1, 2020 and up to December 31, 2023 total less than CAD\$8 million, then Resverlogix and Hepalink shall negotiate a mutually-agreeable timeframe regarding any difference, in principle by not later than June 30, 2024.

In July 2020, we entered into an agreement with a supplier to settle amounts owing by us, whereby we agreed to pay a reduced amount in three instalments of \$200,000, \$550,000 and \$550,000 on August 1, 2020, September 1, 2020 and October 1, 2020 respectively.



We paid the August 1, 2020 instalment, and have paid an additional \$825,000, but have not yet paid the remaining balance of \$275,000. Until we pay the remaining \$275,000, thereby satisfying our obligations pursuant to the agreement, it is possible that the supplier could assert that we are in default and could pursue any remedies that may be available to them.

The Company has not complied fully with the payment terms associated with certain amounts owing to certain vendors. Until the Company fully satisfies its obligations, it is possible that the vendors could assert that the Company is in default and could pursue any remedies available to them.

In 2021, we acquired certain intellectual property for: (a) \$400,000 paid in cash and (b) a \$600,000 milestone payment payable upon submission of a New Drug Application for apabetalone to the US Food and Drug Administration.

## **Significant Accounting Policies and Estimates**

Note 4 to our consolidated financial statements for the year ended December 31, 2021, the eight months ended December 31, 2020 and the year ended April 30, 2020 includes a summary of our significant accounting policies.

The preparation of financial statements requires management to use estimates and assumptions that they believe are reasonable based upon the information available. These estimates and assumptions affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting periods presented. These estimates and assumptions are subject to inherent risk of uncertainty and actual results may differ from these estimates and assumptions.

Significant estimates are used for, but not limited to, the measurement of the fair value of the royalty preferred shares, share-based payment transactions, warrant liability, derivative liability and taxes.

There is estimation uncertainty with regards to the possible impact of the COVID-19 pandemic on our financial results and our condition over the next twelve months.

The outbreak of the novel strain of coronavirus, specifically identified as "COVID-19", resulted in governments worldwide enacting emergency measures to combat the spread of the virus. These measures, which included the implementation of travel bans, self-imposed quarantine periods and social distancing, caused material disruption to businesses globally resulting in an economic slowdown. Global equity markets experienced significant volatility and weakness. Governments and central banksreacted with significant monetary and fiscal interventions designed to stabilize economic conditions. The introduction of vaccines led to optimism and a significant easing of restrictions; however, the situation continues to evolve (including the prevalence of virus variants), and the duration and impact of the COVID-19 pandemic remains unknown at this time, as is the efficacy of the government and central bank interventions. It is not possible to reliably estimate the length and severity of these developments and the impact on our financial results and our condition and our operating subsidiaries in future periods. The COVID-19 pandemic may impact our ability to raise additional capital and/or impact our ability to continue our clinical trials.

## **Off-Balance Sheet Arrangements**

As of June 30, 2022, we have not entered into any off-balance sheet arrangements.

## Summary of Quarterly Results

The following is a summary of selected financial information derived from our unaudited condensed interim consolidated financial statements for each of the eight most recently completed quarters.

(in thousands of US dollars except as otherwise noted)	June 30, 2022	March 31, 2022	December 31, 2021	September 30, 2021
Revenue	-	-	-	-
Total comprehensive (loss)	(403)	(2,332)	(16,896)	(5,286)
Net (loss) per share (\$)				
- basic	(0.00)	(0.01)	(0.07)	(0.02)
- diluted	(0.00)	(0.01)	(0.07)	(0.02)
(in thousands of US dollars except as otherwise noted)	June 30, 2021	March 31, 2021	December 31, 2020 <sup>(1)</sup>	October 31, 2020
Revenue	-	-	-	-
Total comprehensive (loss) income	(2,609)	20	11,271	(3,420)
Net (loss) income per share (\$)				
- basic	(0.01)	0.00	0.06	(0.02)
- diluted	(0.01)	0.00	0.06	(0.02)

(1) Condensed period (2 months) due to change in reporting period.

Items that impact the comparability of quarterly results of operations presented above include:

- Research and development was impacted by the particular stage of our clinical trials during each particular quarter.
- Research and development was also impacted by the timing of costs related to our chemistry and nonclinical studies.
- Liability-classified warrants issued pursuant to unit offerings with an exercise price denominated in a currency other than an entity's functional currency are remeasured to reflect the change in fair value as at the end of the reporting period, with changes in fair value recognized in the statement of comprehensive (income) loss, resulting in volatility in quarterly income (loss).
- Royalty preferred shares are remeasured to reflect the change in estimated fair value at the end of the reporting period, with changes in estimated fair value recognized in the statement of comprehensive (loss) income, resulting in volatility in quarterly (loss) income.
- Interest and accretion was impacted by entering into the US\$12.0 million Vision Leader Limited convertible debenture with Vision Leader Limited in September 2019 and the conversion of the full principal balance of the Vision Leader Limited convertible debenture in October 2020, and entering into the US\$6.0 million Hepalink Debenture in May 2021 and amending the maturity date of the Hepalink Debenture in April 2022.
- Share-based payments fluctuate from quarter to quarter based on the timing and fair value of restricted stock unit and stock option grants. Share-based payments are a non-cash expense.
- The reversal of accruals in the prior period in connection with restricted stock unit grants in lieu of cash-based compensation.
- The recognition of foreign currency gains and losses resulting from fluctuations in Canadian denominated assets and liabilities and Canadian / US dollar exchange rates.

## **Related Party Transactions**

## Related party transactions with Zenith Capital Corp. ("Zenith")

We have several directors in common with Zenith, and thus are considered related parties. We provide management and administrative services to Zenith pursuant to a Management Services Agreement dated June 3, 2013 between us and Zenith. The purpose of the agreement is to enable the Company to achieve greater utilization of its resources. As consideration for the services, Zenith pays us a service fee, consisting of salary and other compensation costs attributable to the services and reimbursable expenses incurred by Resverlogix in connection with the services.



#### Hepalink Convertible Debenture

In May 2021, we closed the \$6.0 million Debenture with a subsidiary of Hepalink. The Debenture bears interest at 10% per annum. During the six months ended June 30, 2022, the maturity date of the Debenture, and the corresponding payment date of interest thereon, were both extended by one year from May 13, 2022 to May 13, 2023. Hepalink may elect to convert the principal amount of the Debentures and accrued and unpaid interest thereon into common shares of the Company at a conversion price equal to the lesser of CAD\$0.93 per share and the 5-day volume weighted average trading price of the common shares on the date of conversion. The Company granted Hepalink a security interest in all of its assets, including its patents and other intellectual property, as security for its obligations under the Debenture. In addition, Hepalink received 300,000 common share purchase warrants exercisable for a period of four years from the grant date at a price of CAD\$0.93 per share.

As at June 30, 2022 Hepalink held 34.0% (December 31, 2021 – 35.1%) of Resverlogix outstanding common shares and is considered to have significant influence over us.

## **Outstanding Equity Instruments**

As at August 11, 2022, we had authorized an unlimited number of common shares and preferred shares and 75,202,620 royalty preferred shares.

	As at August 11, 2022	As at June 30, 2022	As at December 31, 2021
Common Shares	263,004,268	251,194,715	243,210,022
Warrants	29,451,591	18,965,175	16,562,588
Stock Options	<b>1,215,000</b> (1)	1,290,000	625,000
Restricted Stock Units	<b>13,640,570</b> (2)	14,465,556	12,258,513
Deferred Share Units	999,195	1,333,925	926,570
Total	308,310,624	287,249,371	273,582,693
Royalty Preferred Shares	75,202,620	75,202,620	75,202,620

(1) 675,000 of 1,215,000 stock options are vested and exercisable.

(2) 13,284,571 of the 13,640,570 restricted stock units are vested.

(3) Subsequent to June 30, 2022, the number of common shares and warrants increased due to a private placement; the number of restricted stock units and deferred share units decreased due to exercises.

In addition, the Company had a \$6 million secured convertible debenture as at June 30, 2022 and August 11, 2022. Additional information relating to our securities can be found in Notes 6, 7 and 8 to the condensed interim consolidated financial statements for the three and six months ended June 30, 2022.

## **Disclosure Controls and Procedures**

We are required to comply with National Instrument 52-109 "Certification of Disclosure in Issuers' Annual and Interim Filings" ("NI 52-109"). Our Chief Executive Officer ("CEO") and Chief Financial Officer ("CFO") are responsible for establishing and maintaining disclosure controls and procedures ("DC&P") for the Company. Our designed DC&P provides reasonable assurance that material information is made known to the certifying officers, and that information disclosed by the Company is done in the time period specified in securities legislation.

## **Internal Controls Over Financial Reporting**

As defined within NI 52-109, our CEO and CFO are responsible for establishing and maintaining internal control over financial reporting ("ICFR"). Our designed ICFR provides reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with Generally Accepted Accounting Principles ("GAAP"). The framework behind the design of the Company's ICFR was the Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO").

There have been no changes in our existing DC&P or ICFR during the period ended June 30, 2022, which have materially affected or are reasonably likely to materially affect the Company's ICFR.



## Outlook

We began patient enrollment in our phase 2 clinical trial in COVID-19 (SARS-CoV-2) in January 2022. In May 2022, we announced that the U.S. Food and Drug Administration had granted us a Type C meeting in August 2022 to review the clinical trial protocol for our Phase 3 study of apabetalone in high-risk COVID-19 outpatients. In response to the transformation of the COVID-19 pandemic, advancement to the Phase 3 will target outpatients with multiple risk factors for serious outcomes, focusing where apabetalone has the greatest potential to impact patient outcomes. The Phase 3, multicenter, randomized clinical trial, entitled: *A Double-Blind Placebo Controlled Study to Assess the Efficacy and Safety of Oral Apabetalone in Elderly Subjects with COVID-19 Infection and High Risk for Severe Illness and to Explore the Potential to Limit Long-Term Symptoms (CORAL), will evaluate the safety and efficacy of apabetalone in preventing serious health outcomes in high-risk COVID-19 patients. Study site selection is currently underway, with sites expected in the United States, Canada, and the Middle East. We will conclude our Phase 2 trial in hospitalized COVID-19 patients early, thus focusing its resources on the advanced Phase 3 program.* 

As described above under "Corporate Developments", our commercialization partnership with EVERSANA provides us with access to a broad range of commercialization services that include market access, agency services, clinical and commercial field teams, medical science liaisons, channel management, patient services, health economics and outcomes research, and compliance, with each service optimized by data and predictive analytics. In the April 2022 Amendment, Resverlogix and EVERSANA expanded their partnership to include not only COVID-19 but also cardiovascular and pulmonary arterial hypertension indications. The partnership currently covers the United States and Canada, but may be expanded to additional global markets should approvals be issued.

Treatment with apabetaone on top of standard of care therapy in recent ACS patients with type II DM and low HDL cholesterol comorbidities, while not reaching statistical significance in the BETonMACE study, showed a strong trend towards a reduction in MACE. A consistent trend was demonstrated for the CV death and non-fatal myocardial infarction components, providing evidence for the potential reduction in these events by 20% in just over two years. Of interest, the prespecified secondary endpoint of first CHF admission was reduced by 40% with apabetalone. When CHF was added to the primary endpoint and stroke excluded (post hoc), a significant reduction of 23% was observed. The narrow miss of the primary endpoint coupled with improvements in key secondary endpoints and exploratory subgroups represent provisional clinical evidence that epigenetic modulation by BET protein inhibition may be a potential therapeutic approach to the prevention of MACE and CHF. The granting of BTD by the FDA, the first for a major cardiovascular indication, will allow us to work closely with the FDA to facilitate a time-efficient drug development program including planned clinical trials and plans for expediting the manufacturing development strategy for apabetalone.

We continue to explore two potential options for a follow-on CV outcomes study. These potential trials are based on the effects CV outcome results observed in BETonMACE (described above) and are being evaluated for their sample size thresholds, ease and length of recruitment, and study duration requirements. The first trial is similar in design to the BETonMACE study but includes an increased proportion of patients with CKD. This trial would potentially include patients with T2DM, recent-ACS and low high-density lipoprotein cholesterol (HDL-C) co-morbidities with at least 25% of patients with glomerular filtration rate (GFR) between 25 and 60 mL/min (CKD Stage 3). Alternatively, the other trial would have a greater focus on patients with CKD. This trial would potentially include patients with T2DM, a history of CVD, CKD Stage 3 (defined as an eGFR of 20-60 mL/min) and low HDL-C. The Company is currently preparing to finalize details of our planned and approved FDA phase 3-confirmatory clinical trial with the Clinical Steering Committee from BETonMACE and other key leaders in the fields of clinical trial statistics, CKD, and CVD.

An exploratory assessment of cognition in patients over the age of 70 years in the BETonMACE study revealed a statistically significant improvement in MoCA in patients with a baseline MoCA below 22 (deemed as mild to severe cognitive impairment). This observation on BET inhibition and the potential modulation of cognitive function in elderly patients with high-risk cardiovascular disease and DM provides the rationale for further research and analysis which is ongoing.

We have continued to explore the biology surrounding BET inhibition using a variety of cells, cell-based models and cell lines, as well as our archived clinical trial blood samples. Numerous pathways and genes that are regulated in response to BET inhibition have been identified and research continues in an ongoing basis. From this effort, we have been able to explore the biological processes underlying CVD and MACE as well as having identified several potential indications based on the data observed. We continue to explore the preferential binding of apabetalone to the BD2 of BET family members. This BD2 selectivity differentiates apabetalone from other BET inhibitors in pre-clinical development and may aid in the discovery of follow-on compounds in indications other than high risk vascular disease. With these clinical findings and the further advancement of scientific knowledge gained regarding the mechanism of action through which apabetalone functions, we intend to continue to expland our research and development to explore apabetalone as a potential breakthrough in the treatment paradigm for minimizing CV risk.

The results of the BETonMACE study validate the need to continue the clinical development of apabetalone in patients with high-risk CVD, an area of critical unmet need. Novel medications capable of reducing this residual risk are urgently needed; therefore, apabetalone represents a novel and potentially more effective approach to this clinical issue. Partnership discussions based on the results from the BETonMACE study, including the synergistic finding with new classes of anti-diabetic therapies, the pronounced effect



on patients with CKD stages 3 or worse, the improvement in cognition in cognitively impaired patients and the observed effect on CHF, are ongoing. Appropriate IP filings are also ongoing. The Company's intellectual property portfolio was significantly strengthened by the recent filing of three additional patent applications for the observed effects in BETonMACE of apabetalone in combination with the leading anti-diabetes treatments, SGLT2 inhibitors.

Based on our knowledge of epigenetics and BET inhibition, coupled with the analysis of the pathways, genes and biomarkers affected by apabetalone treatment and that underlie disease pathology, additional indications and potential orphan disease indications have been investigated. In May 2017, we announced that we had received approval from the TPD to proceed with a clinical trial of apabetalone in patients with Fabry disease. Preclinical investigation of the effects of apabetalone on blood collected from Fabry disease patients is currently underway. This study is planned once we raise the required capital. On March 18, 2019, we announced the advancement of a project led by academic collaborators at Quebec Heart and Lung Institute, Laval University, to research the clinical potential of apabetalone as a potential therapy for PAH. An article titled: "Multicenter Preclinical Validation of BET Inhibition for the Treatment of Pulmonary Arterial Hypertension" was published in the high-impact, peer-reviewed medical journal, American Journal of Respiratory and Critical Care Medicine, published by the American Thoracic Society. This article presented our collaborative work with top research groups in Canada and the Netherlands and illustrated the beneficial effects of apabetalone treatment in several animal and cell models of PAH. A clinical pilot study, APPRoAcH-p, commenced in September 2019 to evaluate the potential use of apabetalone, assessing patient safety and effects on key biomarkers of PAH. The study was completed in late 2021, finding that apabetalone was well tolerated by study participants and observing improvements in key hemodynamic outcome measures, including pulmonary vascular resistance, cardiac output, and stroke volume. These findings were also published in the American Journal of Respiratory and Critical Care Medicine. Mechanistic evidence through analysis of in vitro and clinical data suggests that BET inhibition via apabetalone suppresses pathways and reduces protein levels associated with vascular calcification. We believe that apabetalone and its ability to modulate pathways involved in vascular calcification has the potential to beneficially impact renal patients. With leading experts on our Renal Clinical Advisory Board ("RCAB") providing input and guidance, a pharmacokinetic clinical study in this therapeutic area was initiated. The primary objective of the Phase 1 study was met, allowing us to proceed with more advanced renal impairment and dialysis trials. In May 2017, we announced the acceptance, by the Cardiovascular and Renal Products Division of the FDA, of our IND application to commence a Phase 2a pharmacokinetic and efficacy / safety kidney dialysis trial. This study is planned once we raise the required capital.

In addition to apabetalone, we have commenced preclinical testing on other BET inhibitors in our library of compounds which demonstrate similar efficacy and potency on important markers of vascular inflammation, acute phase response, complement and coagulation. These compounds will be further analyzed and explored for their potential use in orphan disease indications.

As at June 30, 2022, we had \$42 thousand of cash. Subsequent to June 30, 2022, we raised \$2.0 million. Our cash as at June 30, 2022, in combination with the \$2.0 million raised subsequent to June 30, 2022, is not sufficient to fund our contractual commitments or our planned business operations over the next year. We will have to raise additional capital. If we are not able to raise capital, we may be forced to cease operations. We continue to pursue and explore a range of opportunities including partnering and regional licensing as well as equity offerings. However, there is no assurance that these arrangements will be completed. Delays in securing funding could potentially delay future clinical trials and obtaining regulatory approvals necessary for the commercialization of apabetalone.

## **Risks and Uncertainties**

An investment in the Company should be considered highly speculative due to the nature of its activities and the stage of its development. Biotechnology research and development involves a significant degree of risk. The risks and uncertainties set forth below are not the only ones we will face. Additional risks and uncertainties not presently known to us or that we currently consider immaterial may also impair our business and operations and cause the price of the Common Shares to decline. If any of the following risks actually occur, our business may be harmed and our financial condition and results of operations may suffer significantly. In that event, the value of the Common Shares could decline and purchasers of the Common Shares or securities convertible into Common Shares may lose all or part of their investment. Readers should carefully consider the following risk factors in addition to the other information contained herein before investing in the Company.

## **Risks Relating to Our Business**

## We have a history of net losses and negative cash flow. We expect to continue to incur substantial net losses for the foreseeable future, and we may never achieve or maintain positive cash flow.

To date, we have not recorded any revenues from the sale of biopharmaceutical products, and have incurred significant negative cash flows in many periods since our inception. As at June 30, 2022, we had a deficit of US\$444.8 million. We expect to incur substantial net losses and negative cash flow for the foreseeable future. Such losses and negative cash flow have had, and will continue to have, an adverse effect on our shareholders' equity and working capital.



The process of developing and commercializing our products requires significant preclinical testing and clinical trials as well as regulatory approvals for commercialization and marketing before we could begin product sales. In addition, commercialization of our products would require us to establish a sales and marketing organization or contractual relationships to enable product manufacturing and other related activities. Because of the numerous risks and uncertainties associated with pharmaceutical product development and commercialization, we are unable to accurately predict the timing or amount of future expenses or when, or if, we will be able to achieve or maintain positive cash flow. Currently, we have no products approved for commercial sale, and to date we have not generated any product revenue. We have financed our operations primarily through the sale of equity securities and advances pursuant to credit facilities. The size of our future negative cash flow will depend, in part, on the rate of growth or contraction of our expenses and the level and rate of growth, if any, of our revenues. We expect to report net losses and negative cash flow unless and until such time as payments, if any, from corporate collaborations, product sales and/or royalty payments generate sufficient revenues to fund our continuing operations. Quarter to quarter fluctuations in revenues, expenses, net losses and cash flow are also expected. Even if we do achieve profitability, we may not be able to sustain positive cash flow on an ongoing basis.

## We will need to raise additional capital in the future to fund our operations. If we cannot raise additional capital, we will have to delay, reduce or cease operations.

We will need to raise additional capital to fund our operations and to develop our products. We expect to raise additional funds through public or private equity or debt financing and/or from other sources. Our future capital requirements will be substantial and will depend on many factors, such as the following:

- the scope, rate of progress, results and costs of any clinical and nonclinical programs;
- timing, costs and outcomes of regulatory proceedings;
- the cost and timing of developing sales and marketing operations or partnerships;
- payments received under any future partnerships;
- prosecution or defense of patent claims;
- the cost and timing of developing manufacturing capacity;
- costs associated with commercialization of our products; and
- competing technological and market developments, including the introduction by others of new therapies in our market.

Our cash as at June 30, 2022, in combination with the \$2.0 million we raised subsequent to June 30, 2022, is not sufficient to fund our contractual commitments or our planned business operations over the next year. We will have to raise additional capital. If we are not able to raise sufficient capital to fund our operations, we may be forced to cease operations. These conditions result in a material uncertainty which casts significant doubt on our ability to continue as a going concern.

The Company has not complied fully with the payment terms associated with certain amounts owing to certain vendors. Until the Company fully satisfies its obligations, it is possible that the vendors could assert that the Company is in default and could pursue any remedies available to them.

We will also require additional capital to fund research, development and corporate activities beyond the next year. We will continue to explore alternatives to generate additional cash including raising additional equity and product licensing; however, there is no assurance that these initiatives will be successful. We intend to raise capital from equity and/or debt offering and/or partnering in the future.

Further, changing circumstances may cause us to consume capital significantly faster or slower than we currently anticipate. We have based these estimates on assumptions that may prove to be wrong, and we could utilize our available financial resources sooner than we currently expect.

There can be no guarantee that we will be able to access capital markets in the future to fund our ongoing operations. If we cannot access capital markets in the future we may be forced to cease operations. Any financing transaction may contain unfavourable terms. If we raise additional funds by issuing equity securities, our stockholders' equity will be diluted. If we raise additional funds through strategic partnerships, we may be required to relinquish rights to our products, or to grant licenses on terms that are not favourable to us.

#### There is no certainty that insiders will make further investments in the Company.

In recent years, we have often raised additional capital to fund repayment of indebtedness and operating activities through private placements of equity and debt securities to insiders of the Company. However, there is no certainty that insiders will continue to make further investments in the Company or that any further investments will be sufficient to fund the Company's existing obligations or ongoing research and development activities. In addition, there are restrictions relating to the amount that insiders may invest in the



Company pursuant to stock exchange policies and applicable securities laws, without the Company obtaining the prior approval of shareholders. There is no certainty that all necessary approvals could be obtained to enable insiders to make further investments in the Company or that the Company will be able to obtain such approvals in a timely manner.

#### We are a development stage company. If we do not develop commercially successful products, we may be forced to cease operations.

We are a development stage company, which may require significant additional investment for research and development, manufacturing, clinical testing, and regulatory submissions prior to commercialization. Investors must evaluate our business in light of the uncertainties and complexities affecting a development stage biotechnology company and there can be no assurance that any such product will eventually be developed. Any product would be unsuccessful if it:

- does not demonstrate acceptable safety and efficacy in preclinical studies and clinical trials or otherwise does not meet applicable regulatory standards for approval;
- does not offer therapeutic or other improvements over existing drugs used to treat the same or similar conditions;
- is not capable of being produced in commercial quantities at an acceptable cost, or at all; or
- is not accepted by patients, the medical community or third party payors.

A commitment of substantial time and resources is required to conduct research and clinical trials if we are to complete the development of any product. We have not proven our ability to develop and commercialize products. It is not known whether any of these products will meet applicable health regulatory standards and obtain required regulatory approvals, or (i) whether such products can be produced in commercial quantities at reasonable costs and be successfully marketed, (ii) whether our products will achieve market acceptance, or (iii) if our investment in any such products will be recovered through sales or royalties. Problems frequently encountered in connection with the development and utilization of new and unproven technologies and the competitive environment in which we operate might limit our ability to develop commercially successful products.

Results of early research and development may not be indicative of the results that will be obtained in later stages of research and development. If regulatory authorities do not approve the products or if regulatory compliance is not maintained, we would have limited ability to commercialize our products, and our business and results of operations would be harmed. We may fail to develop any products, to obtain regulatory approvals, to enter clinical trials, or to commercialize any products. If we are unable to make our product candidates commercially available, we will not generate product revenues, and we may be forced to cease operations.

## We have been advanced funds under a secured convertible debenture and failure to pay all amounts when they become due could result in a loss of all of our assets.

In May 2021, we obtained a US\$6 million Debenture from Hepalink. The Debenture bears interest at a rate of 10% per annum. During the six months ended June 30, 2022, the maturity date of the Debenture, and the corresponding payment date of interest thereon, were both extended by one year from May 13, 2022 to May 13, 2023. The loan is secured by all of our assets.

We do not currently have sufficient cash available to repay the principal amount of the Debenture when it becomes due. Unless the Debenture is converted in full into equity or the maturity date is extended, we will have to raise additional capital to repay the Debenture on the maturity date of May 13, 2023.

If an event of default under the Debenture occurs, the lender could elect to declare all principal amounts outstanding under the loan at such time, together with accrued interest and applicable fees, to be immediately due and payable. If we are unable to repay amounts owing under the loan, the lender could proceed to foreclose or otherwise realize upon all of our assets, including our intellectual property, that is security for the indebtedness.

#### Unstable market conditions may have serious adverse consequences on our business.

The economic downturn and market instability made the business climate more volatile and more costly. Market conditions have been particularly impacted by the COVID-19 pandemic. Our business strategy may be adversely affected by unpredictable and unstable market conditions. If the current equity and credit markets deteriorate it may make any necessary equity or debt financing more difficult, more costly, and more dilutive. Failure to secure any necessary financing in a timely manner and on favourable terms could have a material adverse effect on our growth strategy, financial performance and stock price and could require us to delay or abandon clinical development plans. There is a risk that one or more of our current or future strategic partners may encounter difficulties during challenging economic times, which would directly affect our ability to attain our operating goals on schedule and on budget.



## If our clinical trials fail to establish the safety and efficacy of our products, including apabetalone, we will not be able to commercialize our products.

Drug discovery and development has inherent risk and the historical failure rate is high. Failures in the HDL cholesterol market by some pharmaceutical companies have highlighted the risk of these types of therapies.

To obtain regulatory approval to market and sell any of our products, we must satisfy the FDA, the TPD, and other regulatory authorities, through extensive clinical trials and preclinical studies, that our products are safe and efficacious. The BETonMACE trial did not meet its primary endpoint and if we cannot demonstrate that our drugs, including apabetalone, are safe and effective for human use, we may need to abandon one or more of our drug development programs.

We may not have conducted or may not conduct in the future the types of testing ultimately required by regulatory authorities, or future tests may indicate that our products are not safe for use in humans. Preclinical testing and clinical trials are expensive, can take many years and have an uncertain outcome. In addition, success in initial preclinical testing does not ensure that later preclinical testing or clinical trials will be successful. There are a number of factors that could cause a clinical trial to fail or be delayed including:

- the clinical trials may produce negative or inconclusive results, which may require us to conduct additional preclinical testing or to abandon product candidates that we believed to be promising;
- the regulators may require that we hold, suspend or terminate clinical research for noncompliance with regulatory requirements;
- we, our potential partners, the FDA, the TPD or foreign regulatory authorities could suspend or terminate a clinical trial due to adverse side effect of a drug on subjects or patients in the trial;
- we may decide, or regulators may require us, to conduct additional preclinical testing or clinical trials;
- enrollment in our clinical trials may be slower than anticipated;
- the cost of our clinical trials may be greater than anticipated;
- our product candidates may have unfavourable pharmacology, toxicology or carcinogenicity;
- our product candidates may cause undesirable side effects; and
- the supply or quality of our drugs or other materials necessary to conduct clinical trials may be insufficient, inadequate or delayed.

If any of our product candidates in clinical studies, including apabetalone, do not show sufficient efficacy in patients with the targeted indication, it could negatively impact our development and commercialization or goals for this and other product candidates and, as a result, materially adversely affect our business, financial condition and results of operations.

## We may be required to conduct additional clinical trials to address concerns that the use of our leading product, apabetalone, might increase the risk of liver injury. This may materially adversely affect our business, financial condition and results of operations.

In our Phase 2 ASSERT clinical trial, some patients had elevations in serum enzymes which are sensitive markers of liver injury; however other clinical laboratory tests indicate there was no impairment in liver function and patients were asymptomatic for liver injury. Most of these liver signals occurred between weeks five and ten with fewer occurrences between weeks ten and thirteen. In our subsequent Phase 2b clinical trials, SUSTAIN and ASSURE, increases in ALTs were observed in a small group of patients. Those who had ALT elevations of 3X ULN all dosed through the trial which potentially illustrated adaptability to the drug. Those who had elevation greater than 5XULN, a high number of those patients had pre-existing liver condition such as hepatitis and took known agents that cause ALT elevations such as acetaminophen, clavulanic acid, diclofenac, and Augmentin. These increases were all observed within weeks 12 and 24 of the trial. Upon stopping apabetalone ALT elevations returned to ULN quickly which further illustrates a lack of hepatotoxicity. We also performed the FDA's liver analysis tool ("eDISH") which further illustrated that there were no Hy's Law (elevated ALT and total bilirubin) cases. With these learnings, we believe that the current therapeutic regimen can be safe with regard to effects on the liver. However, if further tests were to determine such risk did exist, the FDA may require us to conduct additional clinical trials to address these concerns prior to receiving FDA or foreign regulatory approval for apabetalone. These clinical trials would be expensive and could delay any commercialization of apabetalone. Adverse results in these trials could delay or prevent commercialization of apabetalone.

## If our testing assumptions are incorrect our products may not be approved for marketing.

The design of our clinical trials is based on many assumptions about the expected effect of our product candidates. If those assumptions prove incorrect, the clinical trials may not produce statistically significant results. We cannot assure you that the design of, or data collected from, the clinical trials of our product candidates will be sufficient to support the FDA and foreign regulatory approvals.



## We are dependent on third parties to conduct our clinical trials and to provide services for certain important aspects of our business. If these third parties do not perform as contractually required or expected, we may not be able to obtain regulatory approval for our products, or we may be delayed in doing so.

We rely on third parties, such as contract research organizations, medical institutions, academic institutions, independent clinical investigators and contract laboratories, to conduct our clinical trials and preclinical studies, and we expect to continue to do so in the future. We rely heavily on these parties for successful execution of our clinical trials, but do not control many aspects of their activities. As a result, many important aspects of our product development are outside our direct control. We are responsible for confirming that our preclinical studies are conducted in accordance with applicable regulations and that each of our clinical trials is conducted in accordance with its general investigational plan and protocol. The FDA requires us to comply with regulations and standards, commonly referred to as good laboratory practices, or GLP, for conducting and recording the results of our preclinical studies and good clinical practices for conducting, monitoring, recording and reporting the results of clinical trials, to assure that data and reported results are accurate and that the clinical trial participants are adequately protected. Our reliance on third parties does not relieve us of these responsibilities. If the third parties conducting our clinical trials do not perform their contractual duties or obligations, do not meet expected recruitment or other deadlines, fail to comply with the FDA's good clinical practice regulations, do not adhere to our clinical trial protocols or otherwise fail to generate reliable clinical data, development, approval and commercialization of our products, including apabetalone, may be extended, delayed or terminated or may need to be repeated, and we may not be able to obtain regulatory approval.

We do not currently own or operate manufacturing facilities for clinical or commercial production of the active pharmaceutical ingredient, or API, used in apabetalone. As a result, we rely on third parties to supply the API. We expect to continue to depend on third parties to supply the API for our lead product candidate and any additional product candidates we develop in the foreseeable future. An API manufacturer must meet high precision and quality standards for that API to meet regulatory specifications and comply with regulatory requirements. A contract manufacturer's failure to comply with applicable regulations and requirements could result in refusal to approve or a delay in approval of apabetalone or other product candidates. We are ultimately responsible for confirming that the APIs used in our product candidates are manufactured in accordance with applicable regulations. Furthermore, if our third-party drug suppliers fail to achieve and maintain high manufacturing standards in compliance with applicable regulations, we could be subject to certain product liability claims in the event such failure to comply resulted in defective products that caused injury or harm.

# Natural disasters, public health crises, political crises, and other catastrophic events or other events outside of our control may damage the facilities or disrupt the operations of our strategic partners, third-party manufacturers, suppliers or other third parties upon which we rely, and could delay or impair our ability to initiate or complete our clinical trials or commercialize approved products.

Our strategic partners, third-party manufacturers, suppliers and other third parties upon which we rely have operations around the world and are exposed to a number of global and regional risks outside of our control. These include, but are not limited to: natural disasters, such as earthquakes, tsunamis, power shortages or outages, floods or monsoons; public health crises, such as pandemics and epidemics; political crises, such as terrorism, war, political instability or other conflict; or other events outside of our control.

We cannot presently predict the scope and severity of any potential business shutdowns or disruptions, but if we or any of the third parties with whom we engage, including the suppliers, regulators and other third parties with whom we conduct business, were to experience shutdowns or other business disruptions, our ability to conduct our business in the manner and on the timelines presently planned could be materially and negatively impacted.

The outbreak of the novel strain of coronavirus, specifically identified as "COVID-19", resulted in governments worldwide enacting emergency measures to combat the spread of the virus. These measures, which included the implementation of travel bans, self-imposed quarantine periods and social distancing, caused material disruption to businesses globally resulting in an economic slowdown. Global equity markets experienced significant volatility and weakness. Governments and central banks reacted with significant monetary and fiscal interventions designed to stabilize economic conditions. The introduction of vaccines led to optimism; however, the situation continues to evolve (including the prevalence of virus variants). The duration and impact of the COVID-19 pandemic is unknown at this time, as is the efficacy of the government and central bank interventions. It is not possible to reliably estimate the length and severity of these developments and the impact on the financial results and condition of the Company and its operating subsidiaries in future periods. If the COVID-19 pandemic continues or increases in severity and results in expanded or prolonged travel, commercial or other similar restrictions, we could experience supply, logistics or other disruptions, which could have a negative impact on our ability to conduct research and development (including clinical development) or commercialize products. The COVID-19 pandemic may impact our ability to raise additional capital and/or impact our ability to continue our clinical trials.

## We rely on partnerships and strategic relationships for our success. The failure to successfully collaborate with third parties may delay, prevent or otherwise impair the development or commercialization of our products or revenue expectations.

In June 2021, we entered into a partnership with EVERSANA. EVERSANA is supporting the planned commercialization of apabetalone for the treatment of COVID-19 in the United States and Canada as Emergency Use Authorization and/or a New Drug Application or



equivalent if issued or approved in these two countries. In the April 2022 Amendment, the Company and EVERSANA expanded its partnership to include cardiovascular and pulmonary arterial hypertension indications. EVERSANA is providing fully integrated commercialization services including market access, agency services, clinical and commercial field teams, medical science liaisons, channel management, patient services, health economics and outcomes research, and compliance. The partnership may be expanded to include additional global markets, should additional approvals be issued. There can be no assurance that commercialization of apabetalone for the treatment of any indication will be successful.

As a result of the costs associated with commercializing a product candidate, we seek strategic partnerships with corporate and academic collaborators, licensors, licensees and others for the research, development, clinical testing, manufacturing, marketing and commercialization of our products, and we intend to attract corporate partners and enter into additional research collaborations. Our goal is to partner apabetalone so that it may be developed for clinical conditions. There can be no assurance, however, that such collaborations will be established, that such collaborations will be established on favourable terms, if at all, or that future collaborations will be successful. In particular, failures in HDL cholesterol therapies may negatively impact our potential partners' willingness to enter into partnering agreements due to the potential risks in the cholesterol market and the high clinical costs to bring such drugs to market. Failure to attract commercial partners for our products may result in our incurring substantial clinical testing, manufacturing and commercialization costs prior to realizing any revenue from product sales or result in delays or program discontinuance if funds are not available in sufficient quantities, and this may materially adversely affect our business, financial condition and results of operations.

Should a collaborative partner fail to develop, manufacture, or commercialize successfully any product to which it has rights, or any partner's product to which we have rights, the business may be adversely affected. Failure of a collaborative partner to continue to participate in any particular program could delay or halt the development or commercialization of products generated from such program. In addition, there can be no assurance that the collaborative partners will not pursue other technologies or develop alternative products either alone or in collaboration with others, including our competitors, as a means for developing treatments for the diseases targeted by our programs.

Furthermore, we may hold licenses for certain technologies and there can be no assurance that these licenses will not be terminated, or that they will be renewed on conditions acceptable to us. We may negotiate additional licenses in respect of technologies developed by other companies and academic institutions. Terms of license agreements to be negotiated may include, inter alia, a requirement to make milestone payments, which may be substantial. We may also be obligated to make royalty payments on the sales, if any, of products resulting from licensed technology and, in some instances, are responsible for the costs of filing and prosecuting patent applications.

We face significant competition in seeking appropriate strategic partners, and these strategic partnerships can be intricate and time consuming to negotiate and document. We may not be able to negotiate additional strategic partnerships on acceptable terms, or at all. We are unable to predict when or if we will enter into any additional strategic partnerships because of the numerous risks and uncertainties associated with establishing strategic partnerships. If we are unable to negotiate additional strategic partnerships for our products, we may be forced to delay or terminate development or commercialization of one or more of our products. If we elect to increase our expenditures to fund development or commercialization activities on our own, we may need to obtain additional capital, which may not be available to us.

## If we enter into partnerships or other strategic relationships, we may lose important rights to and control over the development of our products.

As a result of the costs and risks associated with commercializing a product candidate, we will seek strategic partnerships in order to continue to develop and, if approved, market our products. Such strategic partnerships may require us to relinquish control over the timing and manner of clinical trials and commercialization of our product candidates. Strategic partners may experience financial difficulties or choose to terminate the arrangement or independently work on a competing product resulting in the delay or discontinuation of development or commercialization of our product candidates. Furthermore, disputes may arise between us and our strategic partners that result in the delay or termination of the research, development or commercialization of our product candidates or that result in costly litigation or arbitration that diverts management's attention and consumes resources. Strategic partners may not properly maintain or defend our intellectual property rights or may use our proprietary information in a manner that could jeopardize or invalidate our proprietary information or expose us to potential litigation.

#### We may not receive the full payment of all milestone or royalty payments pursuant to partnerships or strategic relationships.

We may enter into license agreements and other forms of agreements with third parties regarding the development and commercialization of our product candidates. These agreements generally require that the third party pays to us certain amounts upon the attainment of various milestones and possibly include royalties on the sale of the developed product. There can be no guarantee that we will receive the payments described in those agreements since the development of the products may be cancelled if clinical



trials do not yield positive results. Under such circumstances, we would not receive royalties as well. Even if the development of a product yields positive results, all of the risks described herein with respect to the obtaining of regulatory approval and market acceptance of the product are applicable. Finally, if there occurs a disagreement between us and the third party, the payment relating to the attainment of milestones or of royalties may be delayed. The occurrence of any of these circumstances could have a material adverse effect on our financial condition and operating results.

## If our products fail to achieve market acceptance for any reason, such failure may materially adversely affect our business, financial condition and results of operations.

There can be no assurance that any of our product candidates, if approved for marketing, will achieve market acceptance. If our product candidates, once approved, do not receive market acceptance for any reason, it will adversely affect our business, financial condition and results of operations. The degree of market acceptance of any products we develop will depend on a number of factors, including:

- the clinical efficacy and safety of our product candidates;
- our product candidates' potential advantages over existing and future treatment methods;
- the price of our products; and
- reimbursement policies of government and third-party payers, including hospitals and insurance companies.

If after we obtain regulatory approval to sell our products, physicians, and healthcare payors fail to adopt our products or conclude that our products are not safe and effective, physicians could choose not to use them to treat patients. Our competitors may also develop new technologies or products which are more effective or less costly, or that seem more cost-effective than our products.

In addition, regulations affecting the pricing of pharmaceutical products may change in ways adverse to us. While we cannot predict the likelihood of any regulatory proposals, if a government agency were to adopt proposals limiting market or third-party payor pricing for pharmaceutical products, it could materially adversely affect our business, financial condition and results of operations.

# We cannot be certain that we will ever obtain regulatory approvals in European countries, the United States, Canada, China, or any other jurisdictions. The failure to obtain such approvals may materially adversely affect our business, financial condition and results of operations.

Biotechnology, medical device and pharmaceutical companies operate in a high-risk regulatory environment. The study, manufacture and sale of products are governed by countries' numerous statutes and regulations. We are required to obtain various regulatory approvals prior to being able to study, commercialize and distribute our product candidates. The regulatory review and approval process required to perform a clinical study in any country includes evaluation of preclinical studies and clinical studies, as well as the evaluation of our manufacturing process. This process is complex, lengthy, expensive, resource intensive and uncertain. Securing regulatory approval to market our products also requires the submission of extensive preclinical and clinical data, manufacturing information regarding the process and facility, scientific data characterizing our product and other supporting data to the regulatory authorities in order to establish its safety and effectiveness. We, or our collaborators, may fail to obtain the necessary approvals to commence or continue preclinical or clinical testing of our product candidates, including apabetalone, or to manufacture or market our products in reasonable time frames, if at all.

Governmental authorities in any country may enact regulatory reforms or restrictions on the development of new therapies that could adversely affect our ability to develop our products. Many of the products and processes that are being currently developed by us require significant development, testing and the investment of significant funds prior to their commercialization. There can be no assurance that apabetalone or any other drugs we attempt to develop will actually be developed to a commercial level. Completing clinical testing through late stage trials and obtaining required approvals is expected to take several years and to require the expenditure of substantial resources. There can be no assurance that clinical trials will be completed successfully within any specified period of time, if at all. Furthermore, clinical trials may be delayed or suspended at any time by us or by the FDA, the TPD or foreign regulatory authorities if it is determined that the subjects or patients are being exposed to unacceptable risks. We may encounter delays or rejections based on varying regulatory interpretations or changes in regulatory agency policies, during the period in which we develop a product.

No assurance can be given that apabetalone or any other product candidate will prove to be safe and effective in clinical trials or that we will receive the requisite regulatory approval. Moreover, any regulatory approval of a drug which is eventually obtained may be granted with specific limitations on the indicated uses for which that drug may be marketed or may be withdrawn if complications occur following initial marketing or if compliance with regulatory standards is not maintained. We have limited experience in filing and pursuing applications necessary to gain these regulatory approvals.

The approval procedures vary among countries and can involve additional product testing and administrative review periods. The time required to obtain approval in various countries vary from one another. Approval in one country does not ensure approval by the



regulatory authorities of other countries. The failure to obtain such approvals may materially adversely affect our business, financial condition and results of operations.

### Regulatory authorities may not approve our products even if they meet safety and efficacy endpoints in clinical trials.

The FDA, the TPD and other foreign regulatory agencies can delay, limit or deny marketing approval for many reasons, including finding a product may not be considered safe and effective; the manufacturing processes or facilities may not meet applicable requirements; or changes in approval policies or regulations. Our product candidates may not be approved even if they achieve their endpoints in clinical trials. Regulatory agencies, including the FDA, or their advisors may disagree with our trial design and our interpretations of data from preclinical studies and clinical trials. Regulatory agencies also may approve a product candidate for fewer or more limited indications than requested or may grant approval subject to the performance of post-marketing studies. In addition, regulatory agencies may not approve the labeling claims that are necessary or desirable for the successful commercialization of our product candidates.

## Our products will remain subject to ongoing regulatory review even if they receive marketing approval. If we fail to comply with continuing regulations, we could lose these approvals, and the sale of any future products could be suspended.

In the event we receive regulatory approval to market a particular product candidate, United States, Canadian or other foreign regulatory authority could condition approval on conducting additional costly post-approval studies or could limit the scope of approved uses. In addition, the product may later cause adverse effects that limit or prevent its widespread use, force us to withdraw it from the market or prevent or delay our ability to obtain regulatory approvals in additional countries. In addition, we will continue to be subject to regulatory review and periodic inspections to ensure adherence to applicable regulations. After receiving marketing approval, the FDA imposes extensive regulatory requirements on the manufacturing, labeling, packaging, adverse event reporting, storage, advertising, promotion and record keeping related to the product. Failure to comply with the regulatory requirements could result in:

- civil or criminal penalties or fines;
- injunctions;
- product seizures, detentions or import bans;
- voluntary or mandatory product recalls and publicity requirements;
- suspension or withdrawal of regulatory approvals; and
- refusal to approve pending applications for marketing approval of new drugs or supplements to approved applications.

#### We may be subject to product liability claims if our products harm people, and we do not have product liability insurance.

The manufacture and sale of pharmaceutical products involve an inherent risk of product liability claims and associated adverse publicity. We have entered into human clinical trials that involve inherent risks in the testing of unproven products. We currently have only clinical trial liability insurance for our products; we do not have product liability insurance. We do not know if we will be able to maintain existing or obtain additional clinical trial liability insurance or obtain product liability insurance on acceptable terms or with adequate coverage against potential liabilities. This type of insurance is expensive and may not be available on acceptable terms. If we are unable to obtain or maintain sufficient insurance coverage on reasonable terms or to otherwise protect against potential clinical trial and product liability claims, we may be unable to commercialize our products. A successful clinical trial liability or product liability claims in excess of our insurance coverage, if any, may require us to pay substantial amounts. This could have a material adverse effect on our business, financial condition and results of operations.

## The pharmaceutical industry is extremely competitive. If our competitors develop and market products that are more effective, safer or less costly than any future products that we may develop, our commercial opportunity will be reduced or eliminated.

The technological competition we face from new and established pharmaceutical companies, biopharmaceutical companies and universities is intense and is expected to increase, in particular in the market for therapeutic products to treat, mitigate or prevent cardiovascular disease. Competitors may develop products more quickly and obtain regulatory approval for such products more rapidly, or develop products which are more effective than those which we intend to develop. Our commercial opportunity will be reduced or eliminated if our competitors develop and commercialize products that are safer, more effective, have fewer side effects or are less expensive than any future products that we may develop and commercialize. In addition, significant delays in the development of our product candidates could allow our competitors to bring products to market before us and impair our ability to commercialize our product candidates. Research and development by others may render our technology or products obsolete or noncompetitive or produce treatments or cures superior to any therapy developed or to be developed by us.

We anticipate that, if approved for the reduction of MACE in cardiovascular / atherosclerotic disease, apabetalone would be positioned to be used in conjunction with leading standard of care statin treatments such as Lipitor and Crestor to further reduce major adverse



cardiac events such as myocardial infarction, stroke and death and potentially compete with other therapeutic programs in development, such as, the LDL reduction programs (PCSK9), sodium-glucose cotransporter-2 inhibitor (SGLT2) programs, dipeptidyl peptidase inhibitor (DPP-4) programs, peptide programs, ApoA-I infusion treatments, delipitated HDL programs and cholesteryl transfer protein ("CETP") inhibitors.

We anticipate that, if apabetalone is approved for reduction of CVD risk and MACE and it improves other biomarkers such as eGFR, Albumin and ALP, apabetalone would potentially compete with, or be added to, novel and existing CKD products in clinical development.

We anticipate that, if approved for neurodegenerative disorders, apabetalone would potentially be used in conjunction with standard of care therapies such as Aricept to improve therapeutic outcomes and/or compete with other agents and novel approaches to this disease such as small molecules, Namenda and PBT2, and monoclonal antibody technologies ("MOABs") such as Bapineuzumab.

We anticipate that, if approved for reduction of CVD risk and MACE in diabetes mellitus patients, apabetalone would potentially be a complimentary agent added to standard of care diabetes mellitus agents in clinical development.

We anticipate that, if approved for the treatment of COVID-19, apabetalone would be used alongside current standard of care therapies to potentially reduce the severity and duration of the disease, shorten related hospitalizations, and limit the need for more serious interventions, such as mechanical ventilation.

Many of our competitors have significantly greater financial resources and expertise in research and development, manufacturing, preclinical testing, conducting clinical trials, obtaining regulatory approvals and marketing approved products than we do. Established pharmaceutical companies may invest heavily to discover quickly and develop novel compounds or drug delivery technology that could make our product candidates obsolete. Smaller or early stage companies may also prove to be significant competitors, particularly through strategic partnerships with large and established companies. In addition, these third parties compete with us in recruiting and retaining qualified scientific and management personnel, establishing clinical trial sites and patient registration for clinical trials, as well as in acquiring technologies and technology licenses complementary to our programs or advantageous to our business. Accordingly, our competitors may succeed in obtaining patent protection, receiving FDA approval or discovering, developing and commercializing products before we do. If we are not able to compete effectively against our current and future competitors, our business will not grow and our financial condition will suffer.

## We are dependent upon retaining and attracting key personnel and others, the loss of which could materially adversely affect our business, financial condition and results of operations.

We depend on certain members of our management and scientific staff, the loss of whose services might significantly delay or prevent the achievement of research, development or business objectives and would materially adversely affect our business, financial condition and results of operations. We do not have employment agreements with any of our senior management that would prevent them from leaving us. In addition, our success depends, in large part, on our ability to improve our management systems and attract and retain qualified management, scientific and medical personnel, and on our ability to develop and maintain important relationships with commercial partners, leading research institutions and key distributors. We face intense competition for such personnel and relationships. We cannot assure that we will attract and retain such persons or maintain such relationships. In addition, failure to succeed in clinical trials may make it more challenging for us to recruit and retain qualified scientific personnel.

## We may not be able to attract, train and retain a sufficient number of qualified employees to maintain and grow our business.

We expect that our potential expansion into areas and activities requiring additional expertise, such as further clinical trials, governmental approvals, manufacturing, sales, marketing and distribution will place additional requirements on our management, operational and financial resources. We expect these demands will require an increase in management and scientific personnel and the development of additional expertise by existing management personnel. There is currently aggressive competition for employees who have experience in technology and engineering. The failure to attract and retain such personnel or to develop such expertise could materially adversely affect our business, financial condition and results of operations.

## Confidentiality agreements with employees and others may not adequately prevent disclosure of trade secrets and other proprietary information. Disclosure of this information may materially adversely affect our business, financial condition and results of operations.

We rely on trade secrets, which we seek to protect, in part, through confidentiality and non-disclosure agreements with our employees, collaborators, suppliers, and other parties. There can be no assurance that these agreements will not be breached, that we would have adequate remedies for any such breach or that our trade secrets will not otherwise become known to or independently developed by our competitors. We might be involved from time to time in litigation to determine the enforceability, scope and validity of our proprietary rights. Any such litigation could result in substantial cost and divert management's attention from our operations.



## We may need to implement additional finance and accounting systems, procedures and controls in the future as we grow and to satisfy new reporting requirements.

As we grow we may access capital markets more broadly which could require us to implement additional finance and accounting systems along with enhanced internal control systems. This will result in increased costs to us as we continue to undertake efforts to comply with best practices and applicable rules and requirements applicable to public companies. These rules may make it more difficult and costly for us to obtain certain types of insurance, including director and officer liability insurance, and we may be forced to accept reduced policy limits and coverage or incur substantially higher costs to obtain the same or similar coverage as compared to the polices previously available to public companies. The impact of these events could also make it more difficult for us to attract and retain qualified persons to serve on our board of directors or our board committees or as executive officers. In addition, we may need to hire additional legal and accounting staff with appropriate experience and technical knowledge, and we cannot assure that if additional staffing is necessary that we will be able to do so in a timely fashion.

# Our products may not be eligible for reimbursement from government or private third-party payors, or may be eligible for reimbursement at lower prices than we currently anticipate, which could materially adversely affect our business, financial condition and results of operations.

Our ability to successfully market therapeutic products depends in part on the extent to which reimbursement for the cost of such products and related treatments will be available from government health administration authorities, private health insurers and other healthcare organizations. Significant uncertainty exists as to whether newly-approved pharmaceutical products will qualify for reimbursement from these organizations. Furthermore, challenges to the price of medical products continue to grow in frequency due to increased focus on cost containment and pharmacoeconomic issues. These recent changes will become more pronounced as leading therapeutics in the atherosclerosis market such as statins continue to come off patent. Health authorities will continue to increase their scrutiny and pharmacoeconomic diligence on new products in all disease areas including those for the cardiovascular market. These rapid changes in the healthcare reimbursement marketplace will potentially have a significant impact on the future marketability of new drugs in development and could materially adversely affect our business, financial condition and results of operations. It is expected that new drug entrants will not only have to be effective and safe but also have to provide a clear value proposal to health systems, such as risk reduction in MACE, over the current standard of care therapy, statin therapy.

In light of these market changes in drug development, pricing of drug therapies has come under significant pressure with government authorities and private health insurers around the world. The top current leading reimbursed markets; USA, Japan, Germany, UK, France, Spain, Italy, and Canada have implemented healthcare reforms that focus specifically on value and reimbursement. Reforms such as reference-based pricing, pharmacoeconomics, and numbers needed to treat are a few of the many instruments that healthcare organizations utilize to ensure maximum value for reimbursed therapeutics. Healthcare reform is underway in these top global markets and there is additional uncertainty about the viability of current pricing methodologies for reimbursement. There can be no assurance that adequate third-party coverage will be available to establish price levels which would allow us to realize an acceptable return on our investment in product development. If we cannot realize an acceptable return on our investment in product development we may need to delay or cease our product development.

## It may be difficult or impossible for U.S. investors to enforce judgments against us, our directors or our officers in Canada.

We were formed under the laws of the Province of Alberta. Some of the members of our board of directors and our officers are residents of countries other than the United States. As a result, it may be impossible for U.S. investors to affect service of process within the United States upon us or these persons or to enforce against us or these persons any judgments in civil and commercial matters, including judgments under U.S. federal or state securities laws. In addition, a Canadian court may not permit U.S. investors to bring an original action in Canada or to enforce in Canada a judgment of a state or federal court in the United States.

## **Risks Relating to our Intellectual Property**

## We may not accurately predict the protection afforded by our patents and proprietary technology and if our predictions are wrong, this may materially adversely affect our business, financial condition and results of operations.

Our success will depend in part on our ability to obtain, maintain, and enforce patent rights, maintain trade secret protection and operate without infringing the proprietary rights of third parties, both domestically and internationally.

Our patent positions are highly uncertain, and any future patents we receive for our potential products will be subject to this uncertainty, which may adversely affect our business, financial condition and results of operations. There can be no assurance that pending patent applications will be allowed and that we will develop additional proprietary products that are patentable, that issued patents will provide any competitive advantage or will not be challenged by any third parties, or that patents of others will not have an adverse effect on the ability to do business. Furthermore, there can be no assurance that others will not independently develop similar products, duplicate any of the products, or design around the products patented by us. In addition, we may be required to obtain



licenses under patents or other proprietary rights of third parties. No assurance can be given that any licenses required under such patents or proprietary rights will be available on terms acceptable to us. If such licenses are not obtained we could encounter delays in introducing one or more of our products to the market, while we attempt to design around such patents, or could find that the development, manufacturing or sale of products requiring such licenses could be foreclosed. In addition, we could incur substantial costs in defending suits brought against us on such patents or in suits in which we attempt to enforce our own patents against other parties. Such disputes could involve arbitration, litigation or proceedings declared by the U.S. Patent and Trademark Office or International Trade Commission or other foreign patent authorities. Intellectual property litigation can be extremely expensive, and this expense, as well as other consequences should we not prevail, could seriously harm our business. With respect to any infringement claim asserted by a third party, we can give no assurances that we will be successful in the litigation or that such litigation would not have a material adverse effect on our business, financial condition and results of operation.

Until such time, if ever, that patent applications are filed and/or approved, our ability to maintain the confidentiality of the described technology may be crucial to our ultimate possible commercial success. While procedures have been adopted to protect the confidentiality of our technology through signed invention and service agreements, no assurance can be given that such arrangements will be effective, that third parties will not gain access to trade secrets or disclose the technology, or that we can meaningfully protect our rights to our trade secrets.

## Even if valid and enforceable patents cover our products and technologies, such patents will provide protection only for a limited amount of time.

Even if patents are issued regarding our product candidates or methods of using them, those patents can be challenged by our competitors who can argue that our patents are invalid and/or unenforceable. Third parties may challenge our rights to, or the scope or validity of, our patents. Patents also may not protect our products if competitors devise ways of making these or similar product candidates without legally infringing our patents. The Federal Food, Drug and Cosmetic Act and the FDA regulations and policies provide incentives to manufacturers to challenge patent validity or create modified, non-infringing versions of a drug or device in order to facilitate the approval of generic substitutes. These same types of incentives encourage manufacturers to submit new drug applications that rely on literature and clinical data not prepared for or by the drug sponsor.

We also rely on trade secrets to protect our technology, especially where we do not believe that patent protection is appropriate or obtainable. However, trade secrets are difficult to protect. The employees, consultants, contractors, outside scientific collaborators and other advisors of our company and our strategic partners may unintentionally or willfully disclose our confidential information to competitors. Enforcing a claim that a third party illegally obtained and is using our trade secrets is expensive and time consuming and the outcome is unpredictable. Failure to protect or maintain trade secret protection could adversely affect our competitive business position.

Our research and development collaborators may have rights to publish data and other information in which we have rights. In addition, we sometimes engage individuals or entities to conduct research that may be relevant to our business. The ability of these individuals or entities to publish or otherwise publicly disclose data and other information generated during the course of their research is subject to certain contractual limitations. These contractual provisions may be insufficient or inadequate to protect our trade secrets and may impair our patent rights. If we do not apply for patent protection prior to such publication or if we cannot otherwise maintain the confidentiality of our technology and other confidential information, then our ability to receive patent protection or protect our proprietary information may be jeopardized.

## Litigation or other proceedings or third party claims of intellectual property infringement could require us to spend time and money and could shut down some of our operations.

Our commercial success depends in part on not infringing patents and proprietary rights of third parties. Others have filed, and in the future are likely to file, patent applications covering products that are similar to our product candidates, as well as methods of making or using similar or identical products. If these patent applications result in issued patents and we wish to use the claimed technology, we would need to obtain a license from the third party. We may not be able to obtain these licenses at a reasonable cost, if at all.

In addition, administrative proceedings, such as interferences and reexaminations before the U.S. Patent and Trademark Office, could limit the scope of our patent rights. We may incur substantial costs and diversion of management and technical personnel as a result of our involvement in such proceedings. In particular, our patents and patent applications may be subject to interferences in which the priority of invention may be awarded to a third party. We do not know whether our patents and patent applications would be entitled to priority over patents or patent applications held by such a third party. Our issued patents may also be subject to reexamination proceedings. We do not know whether our patents would survive reexamination in light of new questions of patentability that may be raised following their issuance.



## We may be subject to claims for intellectual property infringement from former employers of our key employees, which could result in loss of intellectual property, our key employees or both.

Many of our employees were previously employed at universities or other biotechnology or pharmaceutical companies, including competitors or potential competitors. We could be subject to claims that these employees or we have inadvertently or otherwise used or disclosed trade secrets or other proprietary information of their former employers. In many cases, litigation may be necessary to defend against these claims.

Even if we are successful in defending against these claims, litigation could result in substantial costs and be a distraction to management. If we fail in defending such claims, in addition to paying money claims, we may lose valuable intellectual property rights or personnel. A loss of key research personnel or their work product could hamper or prevent the ability to commercialize certain product candidates, which could severely harm our business, financial condition and results of operations.

## **Risks Relating to Owning our Common Shares**

### Our share price has been and may continue to be extremely volatile. It may be difficult to resell our common shares.

The market price of our common shares has fluctuated substantially in the past, and could fluctuate substantially in the future. During the twelve months preceding June 30, 2022, the closing market price of our common shares ranged from CAD\$0.22 to CAD\$0.83 per share. In addition, the trading prices of life science and biotechnology company stocks in general have experienced extreme price fluctuations in recent years. The valuations of many life science companies without consistent product revenues and earnings are high based on conventional valuation standards, such as price-to-revenue ratios. These trading prices and valuations may not be sustained. Any negative change in the public's perception of the prospects of life science or biotechnology companies could depress our stock price regardless of our results of operations. In addition our stock may fluctuate based on a variety of factors, including actual or anticipated regulatory approvals or disapprovals of our products or competing products, actual or anticipated results and timing of our clinical trials, changes in the expected or actual timing of our development programs, changes in our operating results, conditions or trends in the life science and biotechnology industries, announcements by us or our competitors of significant acquisitions, strategic partnerships, joint ventures or capital commitments, additions or departures of key personnel, sales and distributions of our common shares by us or our shareholders, changes in general conditions in the economy or other developments affecting us, our clients, or our competitors, some of which may be unrelated to our performance.

Among other things, volatility in our share price could mean that investors will not be able to sell their shares at or above prices at which they were acquired. The volatility also could impair our ability in the future to offer common stock as a source of additional capital. In addition, in the past, stockholders have often instituted securities class action litigation after periods of volatility in the market price of a company's securities. If a stockholder files a securities class action suit against us, we would incur substantial legal fees, and our management's attention and resources would be diverted from operating our business in order to respond to the litigation.

## If we sell common shares in the future, existing common shareholders will experience immediate dilution and our stock price may decrease.

We will need to raise additional capital to fund our operations and to develop our products. We will likely raise such additional capital through the sale of our common shares and/or warrants from time to time. Any such financing transaction will result in our existing common shareholders experiencing immediate dilution.

#### If our estimates regarding timing of milestones are incorrect our share price may decrease.

For planning purposes, we estimate and may disclose timing of a variety of clinical, regulatory and other milestones. We base our estimates on present facts and a variety of assumptions. Many underlying assumptions are outside our control such as the ability to recruit patients, obtain access to clinical sites as expected or obtain approval from regulatory bodies such as the FDA to enter into trials. If we do not achieve milestones consistent with investors' expectations, the price of our shares would likely decline.

## We do not currently intend to pay dividends on our common shares and, consequently, investors' ability to achieve a return on investment will depend on appreciation in the price of our common shares.

We have not to date paid any dividends on our Common Shares. We currently intend to invest our future earnings, if any, to fund the development and growth of our business. The payment of dividends will be at the discretion of our board of directors and will depend on our results of operations, capital requirements, financial condition, future prospects, contractual arrangements, restrictions imposed by applicable law, any limitations on payments of dividends present in any debt agreements we may enter into, the dividends that we may be required to be pay to holders of the royalty preferred shares in accordance with the terms of such securities and other factors our board of directors may deem relevant. If we do not pay dividends, your ability to achieve a return on your investment in the



Company will depend on any future appreciation in the market price of our common shares. There is no guarantee that our Common Shares will appreciate in value or even maintain the price at which our holders have purchased their Common Shares.

## **Additional Information**

Additional information relating to Resverlogix, including our Annual Information Form, can also be found on SEDAR at www.sedar.com.